# DEPARTMENT OF THE NAVY FISCAL YEAR (FY) 2005 BUDGET ESTIMATES



# JUSTIFICATION OF ESTIMATES FEBRUARY 2004

OTHER PROCUREMENT, NAVY BUDGET ACTIVITY 4

#### Department of the Navy

Exhibit P-1

PAGE N- 9

## FY 2005 Procurement Program

\* ITEMS UNDER \$50,000

APPROPRIATION: 1810N Other Procurement, Navy DATE: February 2004 TOA, \$ IN MILLIONS (DOLLARS) LINE IDENT FY 2005 ----FY 2003---- E NO ITEM NOMENCLATURE CODE UNIT COST QUANTITY COST QUANTITY COST QUANTITY COST C ----\_\_\_\_\_\_ BUDGET ACTIVITY 04: Ordnance Support Equipment -----Ship Gun System Equipment 101 5110 Gun Fire Control Equipment Α 32.0 [] 102 5112 Naval Fires Control System 5.5 28.1 7.6 U 103 5209 Gun Fire Control Equipment 12.5 11.5 U Ship Missile Systems Equipment 104 5237 NATO Seasparrow 40.5 32.6 25.5 U 105 5238 RAM GMLS 27.1 31.1 23.0 U 106 5239 Ship Self Defense System 42.1 U 45.3 57.7 107 5246 AEGIS Support Equipment 152.2 96.7 57.5 U В 108 5250 Surface TOMAHAWK Support Equipment 52.3 63.0 69.7 U 109 5255 Submarine TOMAHAWK Support Equip 5.1 5.7 5.5 U 7.8 110 5260 Vertical Launch Systems Α 5.3 9.8 U FBM Support Equipment 111 5358 Strategic Missile Systems Equip 73.3 103.1 102.1 U ASW Support Equipment 112 5420 SSN Combat Control Systems 61.7 69.5 147.5 U 113 5431 Submarine ASW Support Equipment Α 7.3 4.9 4.8 U 114 5449 Surface ASW Support Equipment A 6.8 11.7 4.5 U 115 5455 ASW Range Support Equipment Α 7.1 7.2 7.2 U Other Ordnance Support Equipment 116 5509 Explosive Ordnance Disposal Equip B 7.6 12.0 25.1 U

#### UNCLASSIFIED

#### Department of the Navy

# FY 2005 Procurement Program Exhibit P-1

APPROPRIATION: 1810N Other Procurement, Navy DATE: February 2004 TOA, \$ IN MILLIONS (DOLLARS) LINE IDENT FY 2005 ----FY 2003---- E NO ITEM NOMENCLATURE CODE UNIT COST QUANTITY COST QUANTITY COST C \_\_\_\_\_\_ -----3.3 117 5543 Items Less Than \$5 Million A 4.7 4.0 U Other Expendable Ordnance 118 5530 Anti-ship Missile Decoy System A 32.3 49.9 46.6 U 119 5660 Surface Training Device Mods 6.4 7.3 6.3 U 120 5661 Submarine Training Device Mods 18.7 27.4 39.4 U A -----TOTAL Ordnance Support Equipment 589.7 632.9 639.7

# Fiscal Year 2005 Budget Estimates Budget Appendix Extract Language

# **OTHER PROCUREMENT, NAVY (OPN)**

For procurement, production, and modernization of support equipment and materials not otherwise provided for, Navy ordnance (except ordnance for new aircraft, new ships, and ships authorized for conversion); the purchase of passenger motor vehicles for replacement [only, and the purchase of 7 vehicles required for physical security of personnel, notwithstanding price limitations applicable to passenger vehicles but not to exceed \$200,000 per vehicle] *only;* expansion of public and private plants, including the land necessary therefor, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway, [\$4,941,098,000] \$4,834,278,000, to remain available for obligation until September 30, [2006] 2007, of which \$37,373,000 shall be for the Navy Reserve and Marine Corps Reserve. (10 U.S.C. 5013, 5063; Department of Defense Appropriations Act, 2004.)

[For an additional amount for "Other Procurement, Navy", \$76,357,000, to remain available until September 30, 2006.] (Emergency Supplemental Appropriations Act for Defense and for the Reconstruction of Iraq and Afghanistan, 2004.)

		В	UDGET ITE	/ JUSTIFICA	TION SHEET	•			DATE:				
		_		P-40						FE	BRUARY 20	04	
APPROPRIATION/BUDGET ACTIV	/ITY						P-1 ITEM NOM	ENCLATURE					
Other Procurement, Navy													
<b>BA-4 Ordnance Support Eq</b>	uipme	ent					GUN FIRE CO	ONTROL EQU	IPMENT (GFC	E) - 5110**			
Program Element for Code B Items	3:						Other Related I	Program Eleme	nts				
		ID	FY 2002									То	
	(	Code	& Prior		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Total
QUANTITY													
COST													
(In Millions)					32.0	0.0	0.0	0.0	0.0	0.0	0.0		
SPARES COST													
(In Millions)													
EMERGENCY RESPONSE FUND													
(In Millions)													

**Description: (U)** This program provides for procurement of equipment, materials and Ordnance Alterations (ORDALTs) to improve combat effectiveness of and maintain logistic supportability of Gun Fire Control Systems (GFCS) installed on 65 ships (65 MK 86) and 8 shore installations (8 MK 86).

**UK009 Switchboard ORDALTs** - Procures ORDALTs for GFCS MK 86 Switchboards to improve weapon and combat system data switching capability; provides concurrent changes with other ORDALTs; and provides technical documentation upgrades required by interfacing system/equipment ORDALTs.

**UK024 RMA (Reliability, Maintainability and Availability) MK 86** - Procures product Improvement ORDALTs for GFCS MK 86 to correct problems reported by fleet units; upgrades unreliable components and replaces obsolete components and parts no longer in production. Installations to be in ship classes with MK 86 configuration. MK 86 ORDALTs were procured in prior years and are being installed in blocks to reduce total installation costs.

UK039 Night Vision Devices - Procures new Night Vision Devices (NVD) for ships and shore sights. Provides repair or replacement of NVD and NVD Test Equipment.

**UK040 AN/SPQ-9B Radar** - Procures AN/SPQ-9B Radars to add Anti-Ship Missile Defense (ASMD) capability which increases the radar's capability to detect and track low-flying, very small cross-section targets in natural and man-made clutter. Total inventory objective is 118, in the following ship classes: CG-47, DDG-51, CVN, LHD, DD-963, Training unit and LBTS.

UK040 AN/SPQ-9B GFM - Upgrade of U.S. Air Force APG-68 Transmitter for use in AN/SPQ-9B Radar System configuration.

**UK042 AN/SPQ-9B Engineering Change Proposals (ECPs)** - Procures product improvements generated by ECPs; corrects problems reported by fleet units; upgrades unreliable components and replaces obsolete components and parts no longer in production for AN/SPQ-9B Radar.

**UK051 MK 46 Optical Sight Systems (OSS) Product Improvement** - Procure Product Improvements for MK 46 OSS on DDG 51 Class ships. The MK 46 OSS is an integral element of the MK 34 gun weapon system. These improvements provide enhanced force protection capabilities and reduce total ownership costs by improved reliability and supportability of in-service equipment systems.

P-1 SHOPPING LIST

CLASSIFICATION:

DD Form 2454, JUN 86 ITEM NO. 101 PAGE NO. 1

ERF, D Funding \$2.1M is to procure Night Vision Goggles and related night vision equipment.

<sup>\*\*</sup> MK 86 Fire Control System and Night Vision Devices has been reassigned to BLI 520900/5/6 beginning in FY 2004.

<sup>\*\*</sup> SPQ 9B procurement has been reassigned to BLI 202600/05/06 beginning in FY 2004.

BUDGET ITEM JUSTIFICATION SHEET	DATE:
P-40	FEBRUARY 2004
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE
Other Procurement, Navy	
BA-4 Ordnance Support Equipment	GUN FIRE CONTROL EQUIPMENT (GFCE) - 5110
Program Element for Code B Items:	Other Related Program Elements
UK900 AN/SPQ-9B Consulting Services Support - Supports AN/SPQ-9B Radar program and consulting Services Support - Supports AN/SPQ-9B Radar program UK5IN/UK6IN - Installation of Equipments - Provides funding to install ORDALTS at Program - FMP) and shore sites (Non-fleet Modernization Program - NON-FMP)	
LP-1 SHOPPING LIST	CLASSIFICATION:

PAGE NO. 2 DD Form 2454, JUN 86 ITEM NO. 101 **UNCLASSIFIED** 

	WEAPONS SYSTEM CO P-5	ST A	NALYSIS	3												DATE: FEBRU	ARY 2004	4
	OPRIATION/BUDGET ACTIVITY						P-1 ITEM	1 NOMENO	CLATURE/SU	JBHEAD						SUBHEAD	:	
	Procurement, Navy																	
BA-4	Ordnance Support Equipment								ITROL EQ	UIPME	NT (GFC	E) - 5110						24UK
			TOTAL	COST IN	THOUSA	NDS OF	DOLLARS											
COST		ID									FY 200	3		FY 200	)4		FY 2005	5
CODE		Code					Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
							Quantity	01	70101 0001	- Guai iiii)	0 000.		Quartity	01.11. 0001	70101 0001	Quantity		10101 0001
	EQUIPMENT																	
UK009	Switchboard O/A's MK 86	Α										0						
UK024	RMA MK 86	_ ^										1,112						
UK039	Night Vision Devices											1,162						
UK051	MK 46 OSS Product Improvement											7,000						
UNUST	INSTALL											7,000						
UK5IN	Installation of Eqmt FMP (RMA MK 86)											122						
UK6IN	Installation of EqmtNON FMP (RMA MK 86)											31						
												9,427						
	EQUIPMENT																	
UK040	AN/SPQ-9B Radar	Α								3	4,462	13,386						
UK040	GFMAPG-68 Radar Transmitter	Α									,	•						
UK042	Engineering Change Proposals (ECPs)											1,300						
UK830	AN/SPQ-9B Production Support											7,937						
UK900	AN/SPQ-9B Consulting Services											0						
	INSTALL																	
UK5IN	Installation of Eqmt FMP (AN/SPQ-9B)																	
UK5IN	Installation of LW Antenna ECP - FMP																	
UK6IN	Installation of Eqmt NON FMP (AN/SPQ-9B	)																
UK6IN	Installation of LW Antenna ECP	Ì																
	NON FMP (AN/SPQ-9B)																	
												22,622						
1*FY02 U	JK042 is Congressional Plus-up		1	1	l	1	1	1		ı		32.049	1	ı	i	Ì	1	1

DD FORM 2446, JUN 86 CLASSIFICATION:

ITEM NO. 101 PAGE NO. 3

BUDGET PROCURE	MENT HISTO	ORY AND I	PLANNING EXP	liBiT (P-5A)		Weapon System		A. DATE		
								F	EBRUARY 2	2004
B. APPROPRIATION/BUDGE Other Procureme BA-4 Ordnance S	ent, Navy	quipmen	t		C. P-1 ITEM NON	IENCLATURE ONTROL EQUIPMENT (	GFCE) -	5110		24UK
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FISCAL YEAR (03) UK040 SPQ-9B Radar	3	4,462	NAVSEA	Apr-02	SS/FFP	NORTHROP GRUMMAN NORDEN SYSTEMS, INC. MELVILLE, NY	Feb-03	JUL 04	YES	

D. REMARKS

DD Form 2446-1, JUL 87

\*FY03 is an option to FY02 Contract.
\*FY05 is an option to FY 04 Contract.

P-1 SHOPPING LIST Classification:

ITEM NO. 101 PAGE NO. 3A

CLASSIFICATION: UNCLASSIFIED FEBRUARY 2004

P3A		INDIVIDUA	AL MOE	DIFICA	TION																	
MODELS OF SYSTEM AFFECTED:	AN/SPC	)-9B Radar			TYPI	E MODIF	FICAT	ION:	N/A						MOD	IFICATI	ON TI	TLE:	AN/S	PQ-9B Ra	dar	
DESCRIPTION/JUSTIFICATION:																						
Adds Anti-Ship Missile Defense mode: det	ects and	I tracks low	-flying,	extrem	ely sma	all radar	cross	-section	targets	in clutte	r.											
DEVELOPMENT STATUS/MAJOR DEVELO	OPMEN	T MILESTO	NES:	MS II	10/94;	CA 10/9	94; CE	DR 7/95;	LBTS [	OT 10/98	3; DT/0	OT FY03	; FRP	DR FY0	4							
	FY 200 QTY	1 & Prior \$	QTY	\$		<u>/ 2003</u> \$	<u>F\</u> QTY	<u>Y 2004</u> * \$	<u>FY</u> QTY	2005 \$	<u>FY</u> QTY	<u>′ 2006</u> \$	<u>F\</u> QTY	<u>/ 2007</u> \$	<u>FY</u> QTY	<u>2008</u>	<u>F`</u> QTY	<u>Y2009</u> \$	QTY	<u>TC</u> \$	<u>TO</u> QTY	<u>TAL</u> \$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E					0	4.0															0	4.0
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT					3	13.4															3	13.4
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS						1.3																12.5
DATA																						
TRAINING EQUIPMENT																					0	0.0
SUPPORT EQUIPMENT																						0.0
OTHER (PRODUCTION SUPPORT)						7.9																7.9
OTHER (CSS)						0.0																0.0
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST						0.0																0.0
TOTAL PROCUREMENT						22.6																33.8

ITEM NO. 101 PAGE 4 CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED **FEBRUARY 2004** P3A (Continued) MODELS OF SYSTEMS AFFECTED: AN/SPQ-9B MODIFICATION TITLE: AN/SPQ-9B INSTALLATION INFORMATI ALTERATION INSTALLATION TEAM (AIT) METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME: 18 Months CONTRACT DATES: FY 20 N/A FY 2002: Aug 02 FY 2003: Aug 02 DELIVERY DATE: FY 20 N/A FY 2002: Jan 04 FY 2003: Jan 04 (\$ in Millions) FY 2003 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 Cost: FY2002 & Prior Years FY 2004 Total Qty Qty \$ Qty \$ Qty \$ Qty \$ Qty Qty Qty \$ Qty Qty \$ PRIOR YEARS 0.0 FY 2002 EQUIPMENT FY 2003 EQUIPMENT FY 2004 EQUIPMENT 0.0 FY 2005 EQUIPMENT 0.0 FY 2006 EQUIPMENT 0.0 FY 2007 EQUIPMENT 0.0 FY 2008 EQUIPMENT 0.0 0 FY 2009 EQUIPMENT 0.0 TO COMPLETE 0.0 INSTALLATION SCHEDULE: FY 2001 TC FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 & Prior 2 2 TOTAL 1 2 3 4 2 3 4 2 3 4 2 3 0 0 0 0 0 0 0 0 0 0 0 0 In 4 0 Out 4 0 P-3A

CLASSIFICATION: UNCLASSIFIED FEBRUARY 2004

P3A	INDIVIDUAL MODIFICATION		
MODELS OF SYSTEM AFFECTED: GF	S MK 86 TYPE MODIFICATION: Mods 9, 10, 12	MODIFICATION TITLE:	MK86; Gun Fire Control
			Equipment ORDALTs
DESCRIPTION/JUSTIFICATION:			
Provides Product Capability, Safety, and Surviv	bility with RMA Improvements.		

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Continuous Improvements to GFCS MK 86

		1 & Prior		2002		2003		2004		2005		2006		2007		2008		TC .	<u>TO</u>	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				0.0
<u>PROCUREMENT</u>																				
INSTALLATION KITS					10	0.7														0.7
INSTALLATION KITS - UNIT COST						0.0														0.0
INSTALLATION KITS NONRECURRING						0.5														0.5
EQUIPMENT						8.1														8.1
EQUIPMENT NONRECURRING																				
ENGINEERING CHANGE ORDERS																				
DATA																				
TRAINING EQUIPMENT																				
SUPPORT EQUIPMENT																				
PRODUCTION SUPPORT																				
OTHER (ILS/TEST SUPPORT)																				
OTHER (CSS)																				
INTERIM CONTRACTOR SUPPORT																				
INSTALL COST					10	0.2													10	0.2
TOTAL PROCUREMENT					TEM	9.5		DACE N											ONE LINCLA	9.5

ITEM 101 PAGE NO. 6 CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED **FEBRUARY 2004** P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)** MODELS OF SYSTEMS AFFECTED: GFCS MK 86 MODIFICATION TITLE: MK86; Gun Fire Control Equipment ORDALTs ALTERATION INSTALLATION TEAM (AIT) INSTALLATION INFORMATION: METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME: Months CONTRACT DATES: FY 2001: N/A FY 2002: FY 2003: N/A N/A **DELIVERY DATE:** FY 2001: N/A FY 2002: N/A FY 2003: N/A (\$ in Millions) FY 02 and Prior Years Cost: FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 To Complete Total Qtv Qty \$ Qty Qty Qtv Qty \$ Qtv Qtv Qty Qty PRIOR YEARS 1315 0.0 FY 2002 EQUIPMENT 0 0.0 **FY 2003 EQUIPMENT** 5 0.2 0.2 **FY 2004 EQUIPMENT FY 2005 EQUIPMENT FY 2006 EQUIPMENT FY 2007 EQUIPMENT FY 2008 EQUIPMENT FY 2009 EQUIPMENT** TO COMPLETE INSTALLATION SCHEDULE: FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 TC & Prior 2 3 2 3 3 **TOTAL** 3 0 0 In 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Out 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Note: Prior years quantities above reflect total number of ORDALT kits installed. Beginning in FY95, ORDALTs have been procured, packaged, and installed in sets to lower overall ship unit costs. - MK86 BASELINE ORDALTS: 13 (FY94 & Prior) - MK86 BLOCK 1 UPGRADE ORDALTS: 4 (FY95) MK86 BLOCK 2 UPGRADE ORDALTS: 5 (FY96) - MK86 RMA-1 UPGRADE ORDALTS: 3 (FY97 - FY00)

MK86 RMA-2 UPGRADE ORDALTS: 5 (FY01- FY07)

### CLASSIFICATION:

# **UNCLASSIFIED**

			BUI	OGET ITEM .	JUSTIFICAT P-40	ION SHEET	•				DATE: February 2004
APPROPRIATION/BUDG Other Procurement,	-	OTHE	R WEAPON	s			P-1 ITEM NOI <b>BLI: 5112</b>	NAVAL FII	RES CONTR L FIRES NE		И
Program Element for Coo	de B Items:						Other Related	Program Eleme	ents		
	2002 and Prior Years	ID Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Program
QUANTITY											0
COST (\$M)	\$0.6		\$5.5	\$28.1	\$7.6	\$10.9	\$9.9	\$32.8	\$27.2		\$122.7
Initial Spares (\$M)											

<sup>\*</sup>Funding includes FY04 Congressional Adds for NFN BLI 5112 - \$5.062M LSS Remote Sensors, \$15.645M LSS, \$3.290M NFCS for LSS

The Naval Fires Control System (NFCS) is an automated mission planning and coordination system for Naval Surface Fire Support (NSFS) Weapons. NFCS will plan and coordinate the firing of the new NSFS weapon systems.

The Joint Fires Network (JFN) is a system which will automate, coordinate, and correlate, in real time, the processing of multiple tactical data streams from various surveillance/intelligence sources to provide time-critical fire control solutions for advanced weapon systems and sensors. The automation/correlation provided by NFN will provide the Navy an ability to quickly target and re-target precision weapons, greatly enhancing their effectiveness and lethality.

The Littoral Surveillance System (LSS) is an all source intelligence, surveillance, reconnaissance, and targeting system that will receive, process and disseminate information in support of senior military commanders. The system can also be used in peacetime to support the decision making process of civilian authorities in response to Homeland Security requirements and natural disasters such as floods, earthquakes and hurricanes where timely information on conditions in a given geographical area are required.

NOTE: NO ERF, D FUNDS

DD Form 2454, JUN 86

P-1 SHOPPING LIST

ITEM NO 102 PAGE NO 1

CLASSIFICATION:

### **CLASSIFICATION:**

# **UNCLASSIFIED**

					DATE				Febru	ary 2004
APPROPRIATION/BUDGOP,N - BA4 Ordnand		ent	P-1 ITEM NOMENO Naval Fires Netv		0204228N				<b>BLI:</b> 511200	
	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TO COMP	TOTAL
QUANTITY										
COST (in millions)	0.000	0.000	23.997	4.761	4.861	4.850	28.037	23.135	To continue	89.641

<sup>\*</sup>Funding includes FY04 Congressional Adds for NFN BLI 5112 - \$5.062M LSS Remote Sensors, \$15.645M LSS, \$3.290M NFCS for LSS

The Joint Fires Network (JFN) is a system which will automate, coordinate, and correlate, in real time, the processing of multiple tactical data streams from various surveillance/intelligence sources to provide time-critical fire control solutions for advanced weapon systems and sensors. The automation/correlation provided by JFN will provide the Navy an ability to quickly target and re-target precision weapons, greatly enhancing their effectiveness and lethality.

The Littoral Surveillance System (LSS) is an all source intelligence, surveillance, reconnaissance, and targeting system that will receive, process and disseminate information in support of senior military commanders. The system can also be used in peacetime to support the decision making process of civilian authorities in response to Homeland Security requirements and natural disasters such as floods, earthquakes and hurricanes where timely information on conditions in a given geographical area are required.

P-1 SHOPPING LIST

ITEM NO 102

PAGE NO 1-A

**CLASSIFICATION:** 

**UNCLASSIFIED** 

DD Form 2454, JUN 86

	WEAPONS SYSTEM P-5		NALYSIS		Weapon Sy	rstem							DATE: Februa	ry 2004
	RIATION/BUDGET ACTIVITY ocurement, Navy/BA-4				ID Code	NAVAL FI	MENCLATURE RES CONT RES NETW	<b>ROL SYSTI</b>	EM 5112 (A	A4FC)				•
			TOTAL COST IN TH	OUSANDS OF DOLL	ARS									
COST	ELEMENT OF COST	ID	2002 and				FY 2003			FY 2004			FY 2005	
CODE		Code	Prior Years Total Cost			Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
-C001	NFCS Phase I					11	324.09	3,565.0	4	400.0	1,600.0	3	412.00	1,236
FC002	Installation of NFCS Equipment					2	233.50	467.0	5	200.0	1,000.0	4	206.0	824
	NFN										·			
FC004	Installation of NFN Equipment													
FC005	RTC											2	2,075.0	4,150.
FC006	Installation of RTC Equipment (NFN)											2	300.0	600.
FC007	LSS Update								1	15,645.0	15,645.0			
FC008	LSS Remote Sensors								1	5,062.0	5,062.0			
FC009	NFCS for LSS								1	3,290.0	3,290			
FC830	Production Engineering Support (NFCS)							1,431.0			1,529.0			789.
FC832	Production Engineering Support (NFN)													11.
								F						
DD FORM	2446, JUN 86		1 1		P-1 SHOPPI	ING LIST		5,463			28,126 CLASSIFICATION	DN:		7,61

BUDGET PROCURE	MENT HISTO	RY AND PL	ANNING EXHIBIT	Г (Р-5А)		Weapon System		a. date <b>Fe</b>	bruary 20	004
B. APPROPRIATION/BUDGI Other Procuremo		BA-4 Ordna	ance Support	Equipment	C. P-1 ITEM NON NAVAL FILE 5112	MENCLATURE RES CONTROL SYST	ГЕМ	-	SUBHEAD	IFC
				T	CONTRACT	<u> </u>		DATE OF	SPECS	DATE
Cost Element/	QUANTITY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS
FISCAL YEAR		COST (000)	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
NFCS Phase 1										
FY2003	11	324.09	NAVSEA	OCT-02	FFP	TBD	FEB-03	MAY-04	YES	OCT-02
FY2004	4	400.00	NAVSEA	OCT-03	FFP	TBD	FEB-04	MAY-05	YES	TBD
FY2005	3	412.00	NAVSEA	OCT-04	FFP	TBD	FEB-05	MAY-06	YES	TBD
RTC										
FY2003	0	2,075.0			Various	Classified				
FY2004	0	2,075.0			Various	Classified				
FY2005	2	2,075.0			Various	Classified				
LSS Update										
FY2003	0	15,645.0			Various	Classified				
FY2004	1	15,645.0			Various	Classified				
FY2005	0	15,645.0			Various	Classified				
LSS Remote Sensors										
FY2003	0	5,062.0			Various	Classified				
FY2004	1	5,062.0			Various	Classified				
FY2005	0	5,062.0			Various	Classified				
NFCS for LSS										
FY2003	0	3,290.00			Various	Classified				
FY2004	1	3,290.00			Various	Classified				
FY2005	0	3,290.00			Various	Classified				

D. REMARKS

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST Classification:

ITEM NO. 102 PAGE NO. 3

CLASSIFICATION: UNCLASSIFIED		111511/15114																				
РЗА		INDIVIDUA	L MOI	DIFICA	ION																	
MODELS OF SYSTEM AFFECTED:				-	TYP	E MODIF	ICAT	ION:							MOD	IFICATION	IT NC	TLE:			ntrol System	
DESCRIPTION/JUSTIFICATION:																			Phas	ет		
Naval Fires Control System Phase 1 will be	integra	ated in Tacti	cal TO	MAHA	VK We	apons C	ontrol	System	(TTWC	CS) and i	nstalle	ed on CG	's and	DDG's								
-																						
DEVELOPMENT STATUS/MAJOR DEVELO	PMEN	T MILESTO	NES:																			
	EV.	0000 0 D=:			_	<i>,</i> 2002	_		<b>-</b> V	2005		, 2000	_	2007		, 0000		, 0000		TO	то:	ΤΛΙ
	QTY	2002 & Prior \$	QTY	\$	QTY	<u>/ 2003</u> \$	QTY	<u>/ 2004</u> \$	QTY	2005 \$	QTY	<u>2006</u> \$	QTY	2007 \$	QTY	2008 \$	QTY	<u>2009</u> \$	QTY	<u>TC</u> \$	QTY	<u>TAL</u> \$
FINANCIAL PLAN (IN MILLIONS)	Q 1 1	Ψ	1	Ι	1	Ι Ψ	Q I I	Ψ		Ψ		Ψ	Q 1 1	Ψ	Q 1 1	Ψ	QII	Ψ		Ψ	1	T T
RDT&E																						0.00
PROCUREMENT																						
INSTALLATION KITS					11	3.56	4	1.60	3	1.23	13	5.20	5	2.00	7	2.80	7	2.80			50	19.19
INSTALLATION KITS - UNIT COST						0.32		0.40		0.41		0.42		2.00		0.75						0.00
INSTALLATION KITS NONRECURRING																						0.00
EQUIPMENT																						0.00
EQUIPMENT NONRECURRING																						0.00
ENGINEERING CHANGE ORDERS																						0.00
DATA																						0.00
TRAINING EQUIPMENT																						0.00
SUPPORT EQUIPMENT																						0.00
PRODUCTION SUPPORT																						0.00
OTHER (ILS/TEST SUPPORT)																						0.00
OTHER (CSS)																			1 1			0.00
INTERIM CONTRACTOR SUPPORT																						0.00
INSTALL COST					2	0.50	5	1.00	4	0.80	0	0.00	8	2.00	3	0.75	0	0.00	28		50	5.05
TOTAL PROCUREMENT	1		1		11	4.06	4	2.60	3	2.03	13	5.20	5	4.00	7	3.55	7	2.80	1		1	24.24
	1							ITEM			AGE	4							CLAS	SIFICATI	ON: UNCLA	

CLASSIFICATION: UNCLASSIFIED	ı																					
P3A (Continued)		INDIVID	UAL N	MODIFICA	TION (	Continued	1)															
MODELS OF SYSTEMS AFFECTED	):			_			MOD	IFICATION T	ΓITLE:	NAVA	L FIR	ES CONTRO	DL SYS	STEM		_						
INSTALLATION INFORMATION: METHOD OF IMPLEMENTATION:	AL	TERATIO	N INS	TALLATIO	ON TEA	AM (AIT)																
ADMINISTRATIVE LEADTIME:								PRODUCT					15 M	lonths	_							
CONTRACT DATES: FY 2002:	N/A			_				FY 20		N/A							FY 20					
DELIVERY DATE: FY 2002:	N/A	Α		-				FY 20	03:	N/A							FY 20	004: N/A				
										(\$ in Mi	llions)											
Cost:		rior Years	i	FY 2002		Y 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009	To	Complete		tal
	Qty	<b>/</b> \$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS																						
FY 2002 EQUIPMENT			+																		+	
FY 2003 EQUIPMENT					2	0.50															2	0.50
FY 2004 EQUIPMENT					_		5	1.00	)										-		5	
FY 2005 EQUIPMENT									4	0.80											4	
FY 2006 EQUIPMENT											0	0.00									0	0.00
FY 2007 EQUIPMENT													8	2.00	)						8	2.00
FY 2008 EQUIPMENT															3	0.75					3	
FY 2009 EQUIPMENT																	0	0.00			0	
TO COMPLETE																			13	3.2	5 13	3.25
	2002 2 3 4 0 0 0	1 2	0	4 1 0 2	1	2004 3 4 1 1 1 1	1 1 1	FY 2005 2 3 1 1 1 1	4 1 1	1 2	2006 3 2 2	4 1 2 2 2 2	FY 2 2 2 2	2007 - 3 - 2 - 2 - 2 - 2	1 2 2	FY 2008 - 2 3 1 1 2 1	- <mark>- 4</mark> 1 1 1	1 2 2 1 1 2	2009 3 1 1	4 1 13 1 14	TOTAL 50 50	

ITEM NO. 102

PAGE NO. 5

P-3A CLASSIFICATION: **UNCLASSIFIED** 

CLASSIFICATION: UNCLASSIFIED																						
P3A		INDIVIDUA	L MO	DIFICA	TION																	
MODELS OF SYSTEM AFFECTED:	TES-N	١		-	TYP	E MODII	FICAT	ION:				-			MOE	DIFICATION	IT NC	TLE:	Nava	l Fires Ne	twork	
DESCRIPTION/JUSTIFICATION:																						
The later Firm Noticed (IFN) to a contrar				P C.			1	Cara dia			1051	ta affa al a		6				<i>C</i> - 1 - 11°			and the Car	
The Joint Fires Network (JFN) is a system fire control solutions for advanced weapon																						
effectiveness and lethality.	Зузісііі	is and senso	13. 11	ie autoi	nauon,	Correlati	on pic	wided by .	JI IN WII	i provide	uic iv	avy an a	Jility to	quickly	larget	and re-te	iiget p	recision	weapo	iis, greati	, ermanong	uieii
DEVELOPMENT STATUS/MAJOR DEVELO	OPMEN	NT MILESTO	NES:																			
	<b>5</b> ) ( 0.0		_	,	_	,	_		_		_		_	, aaa=	_	,	_					<b>-</b>
	FY 20 QTY	001 & Prior \$	<u>FY</u> QTY	<u>2002</u>	<u>F1</u> QTY	<u>2003                                   </u>	<u>+</u> QTY	<u>Y 2004</u> \$	<u>FY</u> QTY	<u>2005</u> \$	QTY	<u>Y 2006</u> \$	<u>F1</u> QTY	<u>/ 2007</u> \$	<u>F)</u> QTY	<u>/ 2008</u> \$	<u>F'</u> QTY	<u>Y 2009</u> \$	QTY	<u>TC</u> \$	QTY	<u>TAL</u> \$
FINANCIAL PLAN (IN MILLIONS)	QIT	- Φ 	QII	<b>Т</b>	QII	<b>D</b>	QII	<b>D</b>	T	<b>D</b>	QII	<b>D</b>	TUIT	Þ	UIT	<b>Φ</b>	QII	<b>D</b>	QII	Ф	T	T = 0
FINANCIAE FEAN (IN MILEIONS)																						
RDT&E																					+	0.00
PROCUREMENT																						0.00
INSTALLATION KITS																					0	0.00
INSTALLATION KITS - UNIT COST																						0.00
INSTALLATION KITS NONRECURRING																					Ī	0.00
EQUIPMENT															2	16.38	2	16.38			4	32.76
EQUIPMENT NONRECURRING																					Ī	0.00
ENGINEERING CHANGE ORDERS																					Ī	0.00
DATA																					Ī	0.00
TRAINING EQUIPMENT																					1	0.00
SUPPORT EQUIPMENT																						0.00
PRODUCTION SUPPORT																						0.00
OTHER (ILS/TEST SUPPORT)																					1	0.00
OTHER (CSS)																					1	0.00
INTERIM CONTRACTOR SUPPORT																						0.00
INSTALL COST															2	2.00	2	2.00			4	4.00
TOTAL PROCUREMENT								0.00	0	0.00	0	0.00	0	0.00	2	18.38	2	18.38			4	36.76
1		•		•		•		ITEM	102	F	AGE	6	5	•	•	•		•	CLAS	SIFICATI	ON: UNCLA	SSIFIED

P3A (Continued)		INDIVIDU	JAL MO	DDIFICA	TION (C	ontinue	d)																
MODELS OF SYSTEMS AFFECTED:							MOD	IFICATION 1	ΓITLE:	. NAV	AL FIRE	S NETWO	RK (NFN	)									
INSTALLATION INFORMATION: METHOD OF IMPLEMENTATION:	AL	TERATIO	N INST	ALLATIC	ON TEAI	M (AIT)																	
ADMINISTRATIVE LEADTIME:			_					PRODUCT	ION L	EADTIME:		3 Mc	onths										
CONTRACT DATES: FY 2002:	N/A	Α	_					FY 20		N/A	•							FY 2	004 N/A				
DELIVERY DATE: FY 2002:	N/A	Ą						FY 20	03:	N/A								FY 2	004 N/A				
										(\$ in	Millions)												
Cost:	Pi	rior Years	F١	/ 2002	F١	2003		FY 2004		FY 2005		FY 2006		FY 200	7	FY	2008		FY 2009	To	Complete	To	tal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	S Q	ty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS				*																			
FY 2001 EQUIPMENT																							
FY 2002 EQUIPMENT																						1	0.00
FY 2003 EQUIPMENT																						0	0.00
FY 2004 EQUIPMENT																						0	0.00
FY 2005 EQUIPMENT																						0	0.00
FY 2006 EQUIPMENT																						0	0.00
FY 2007 EQUIPMENT																						0	0.00
FY 2008 EQUIPMENT																2	2.00					2	2.00
FY 2009 EQUIPMENT																		2	2.00			2	2.00
TO COMPLETE																						CONT	CONT
INSTALLATION SCHEDULE: FY 2001 FY 20	in2	1 fy	2003		FY 2	004	1	FY 2005		ll fy	<sup>'</sup> 2006		FV	2007			FY 2008		FY 2	2009	TC	11	1
	3 4			4 1	2		1	2 3	4			4   1	2	3	4	1	2 3	4	1 2	3	4   10	TOTAL	
	0 0			0 0		0 0		0 0		0 0		0 0		0			0 0	0	2 0	0	0 CONT		
Out 0 0 0				0 0	0	0 0		0 0	Ö			0 0		0			2 0		0 2	0	0 CONT		
																P-	3A						
				ITEM NO	D. 102	PA	GE NO	D. 7							CLASSIF		ON: UNCLA	ASSIFIED	)				

CLASSIFICATION: UNCLASSIFIED																						
P3A		INDIVIDUA	L MO	DIFICAT	ION																	
MODELS OF SYSTEM AFFECTED:	RTC			_	TYPE	E MODI	FICAT	ION:				<u>-</u>			MOD	IFICATI	ON TI	TLE:	Nava	al Fires Net	work	
DESCRIPTION/JUSTIFICATION:																						
The Joint Fires Network (JFN) is a system	which v	vill automate	coor	dinate a	nd cor	relate i	n real t	time the	proces	ssing of r	multipl	e tactica	l data	streams	from v	arious s	urveill	ance/inte	elligen	ice sources	to provide	time-
critical fire control solutions for advanced v																						
their effectiveness and lethality.	. оцро	0,0101110 0110		0.0	, aaton			.о р.о		0	р.от		a., a.		94.0.	, ta.got	u	o targot	p. 00.0	ion iroupo.	.o, g. oa, o	
DEVELOPMENT STATUS/MAJOR DEVEL	OPMEN	IT MILESTO	NES:																			
												-										
	FY 20	001 & Prior	F١	Y 2002	FY	2003	F١	2004	FY	2005	F١	2006	F۱	<u> 2007</u>	FY	2008	F١	<u> 2009</u>		<u>TC</u>	TO	TAL
	QTY	\$	QTY		QTY		QTY		QTY		QTY		QTY		QTY			\$	QTY		QTY	\$
FINANCIAL PLAN (IN MILLIONS)																		,			T	
RDT&E																					1	0.00
PROCUREMENT																						
INSTALLATION KITS																					1	0.00
INSTALLATION KITS - UNIT COST																					1	0.00
INSTALLATION KITS NONRECURRING																					1	0.00
EQUIPMENT									2	4.15	2	4.15	2	4.15	4	8.30	2	4.15			12	24.90
EQUIPMENT NONRECURRING																					1	0.00
ENGINEERING CHANGE ORDERS																					1	0.00
DATA																					1	0.00
TRAINING EQUIPMENT																					1	0.00
SUPPORT EQUIPMENT																					1	0.00
PRODUCTION SUPPORT																						0.00
OTHER (ILS/TEST SUPPORT)																						0.00
OTHER (CSS)																						0.00
INTERIM CONTRACTOR SUPPORT																						0.00
INSTALL COST									2	0.60	2	0.60	2	0.60	4	1.20	2	0.60			12	3.60
TOTAL PROCUREMENT							0	0	2	4.75	2	4.75	2	4.75	4	9.5	2	4.75			12	28.50
							ITEM	NO. 102	2	F	PAGE	8	3						CLA	SSIFICATION	ON: UNCLA	ASSIFIED

CLASSIFICATION: UNCLASSIFIED	)																						
P3A (Continued)		INDIVIDU	JAL M	ODIFICA	TION (	Continue	ed)																
MODELS OF SYSTEMS AFFECTED	):			<u>-</u>			MOD	IFICATION	TITLE	: NAVAL	FIRES	S NETWORK	(RTC	)		_							
INSTALLATION INFORMATION: METHOD OF IMPLEMENTATION:	ALT	TERATIO	N INS	TALLATIO	ON TEA	AM (AIT)																	
ADMINISTRATIVE LEADTIME:			_					PRODUCT	ION L	EADTIME:		1 mont	th										
CONTRACT DATES: FY 2002:	N/A	ı	_					FY 20	03:	N/A	_				_		FY 20	004: N/A					
DELIVERY DATE: FY 2002:	N/A	ı						FY 20	03:	N/A			-				FY 20	004: N/A					
											Millions												
Cost:		or Years		Y 2002		Y 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		o Compl		Tot	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty :	\$	Qty	\$	Qty	\$	Qty	\$	Qty	+	\$	Qty	\$
PRIOR YEARS				*																			
FY 2002 EQUIPMENT																			]			0	0.00
FY 2003 EQUIPMENT																			]			0	0.00
FY 2004 EQUIPMENT																			]			0	0.00
FY 2005 EQUIPMENT									2	0.60	)								]			2	4.75
FY 2006 EQUIPMENT											2	0.60							]			2	4.75
FY 2007 EQUIPMENT													2	0.6	)				J			2	4.75
FY 2008 EQUIPMENT															4	1.20			]			4	9.50
FY 2009 EQUIPMENT																	2	0.60	<u>/</u>			2	4.75
TO COMPLETE																			<u> </u>			CONT	CONT
INSTALLATION SCHEDULE:	2002	FY	2003		FY 2	2004		FY 2005		FY 2	006		FY	2007	11	FY 2008		FY	2009		<u>TC</u>		l
	2 3 4	1 2		4   1	2	3 4	1	2 3	4	1 2	3	4 1 1	2	3 4	1 1	2 3	4	1 2	3	4		TOTAL	
	0 0 0			0 0	0	0 0	1	1 0	0		0	0 1	1	0 0	2	2 0	0	2 0	0		CONT	12	
	0 0 0	0 0	0	0 0	0	0 0	1	1 0	0	1 1	0	0 1	1	0 0	2	2 0	0	2 0	0		CONT	12	
																P-3A							
				TEM NO	. 102	P/	AGE NO	D. 9						CLASS		ON: UNCLASS	SIFIED						

# UNCLASSIFIED CLASSIFICATION

																													DAT	Έ					
								PR	ODI	JCTI	ON S	CH	EDU	ILE																		Fel	bruar	y 2004	ı
																							(	DOD	EXHIE	BIT P-	21A)							•	
PPROF	PRIATION/BUDGET ACTIVITY												P-1 I	TEM N	NOME	NCLA	TUR	E												S	UBHI	EAD N	10.		
OP,N -	BA4 Ordnance Support Equipment													Nava	I Fires	Netw	ork										020	042281				51120	0		
			s	ACCEP	BAL		CAL Y	/EAR	(	03									FIS	CAL Y			)4							FISCAL			05		
COST	ITEM/MANUFACTURER		E PROC	PRIOR	DUE	CY	_				CAI	END/	AR YE	AR	0:						_		NDAF	YEA	₹	04			⊥			IDAR Y	_		05
CODE			R QTY	то	AS OF	O N		J	F		A M	J	J	Α				D .	JF			М	J			s c						A M			Α
			V	30-Sep	30-Sep		E			A F									A E				-			E						P A			U
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	RTC	02	0		-					_		+								_	1			_	_			+	+	$\vdash \vdash$	+	+	+	+-	₩
	RIC	02	U		<u> </u>		1	1			-	1		-					_		1							+	+	$\vdash \vdash$	+	+	+	+-	₩
	NFN	03	0		1		+	1			-	+		-			-			+	1	-	-	-	-	-	+	+	+-	$\vdash \vdash$	+	+	+	$+\!-$	++
	RTC	03	0									1							_									+	+	$\vdash$	+	+	+	+	++
	KIO	- 03			1			1				1																+	+	$\vdash$	+	+	+	+	+
	NFN	04	0									1																+	+	$\vdash$	+	+	+	+-	+
	RTC	04	0																		1 1							+	$\top$		$\dashv$	$\top$	+	+	$\vdash$
																												$\top$	1			$\top$	$\top$	1	
	NFN	05	0																										$T^{-1}$						
	RTC	05	2																							1		1							
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																												Ш	<u></u> _	ш	丄	丄	Ш	Ш.	
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						OCT NOV	/ DEC	JAN	FEB	MAR AF	PR MAY	JUN	JUL	AUG	SEP	OCT	NOV E	DEC J	N FEE	MAR.	APR	MAY	JUN	JUL A	UG SI	EP O	T NO	V DEC	JAN	FEB N	MAR AF	APR MAY	Y JUN	) JUL	AUG S

			PRODUCTION RATE			PROCUREME	NT LEADTIMES			
	Manufacturer's				ALT Prior	ALT After	Initial	Reorder		Unit of
ITEM	Name and Location	MSR	1-8-5	MAX	to Oct 1	Oct 1	Mfg PLT	Mfg PLT	Total	Measure
NFN	Classified									
RTC	Classified									
LSS	Classified									

NAVMAT FORM 7110/4 (REVISED 11/77)

ITEM NO. 102

PAGE NO. 10

	BUDG	ET ITEM JUSTIFICATION S P-40	SHEET			DATE:		February 200	4	
APPROPRIATION/BUDGET ACTIV	'ITY			P-1 ITEM NOM	IENCLATURE					
Other Procurement, Navy										
BA-4 Ordnance Support Equ	uipment			Gun Fire Cor	ntrol Equipime	ent- 5209				
Program Element for Code B Items:				Other Related	Program Eleme	nts				
	ID Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
QUANTITY										
COST										
(In Millions)		\$0.0	\$12.5	\$11.4	\$8.4	\$4.7	\$5.1	\$5.2	CONT	CONT
SPARES COST										
(In Millions)										
EMERGENCY RESPONSE FUND										
(In Millions)										

**Description: (U)** This program provides for procurement of equipment, materials and Ordnance Alterations (ORDALTs) to improve combat effectiveness of and maintain logistic supportability of Gun Fire Control Systems (GFCS) installed on 65 ships (65 MK 86) and 8 shore installations (8 MK 86).

**UK024 RMA (Reliability, Maintainability and Availability) MK 86** - Procures product Improvement ORDALTs for GFCS MK 86 to correct problems reported by fleet units; upgrades unreliable components and replaces obsolete components and parts no longer in production. Installations to be in ship classes with MK 86 configuration. MK 86 ORDALTs were procured in prior years and are being installed in blocks to reduce total installation costs.

UK039 Night Vision Devices - Procures new Night Vision Devices (NVD) for ships and shore sights. Provides repair or replacement of NVD and NVD Test Equipment.

**UK051 MK 46 Optical Sight Systems (OSS) Product Improvement** - Procure Product Improvements for MK 46 OSS on DDG 51 Class ships. The MK 46 OSS is an integral element of the MK 34 gun weapon system. These improvements provide enhanced force protection capabilities and reduce total ownership costs by improved reliability and supportability of in-service equipment systems.

**UK5IN/UK6IN - Installation of Equipments** - Provides funding to install ORDALTS, field changes and other alterations in ships (Fleet Modernization Program - FMP) and shore sites (Non-fleet Modernization Program - NON-FMP)

P-1 SHOPPING LIST

CLASSIFICATION:

DD Form 2454, JUN 86 ITEM NO. 103 PAGE NO. 1

<sup>\*\*</sup> MK 86 Fire Control System and Night Vision Devices were reassigned from BLI 511000/5/6. FY02 & FY03 funds are refelcted in that BLI.

	WEAPONS SYSTEM COST ANALYS P-5	IS											DATE: Februa	ry 2004	
	PRIATION/BUDGET ACTIVITY					LATURE/SU							SUBHEAD:		
	Procurement, Navy			Gun Fi	re Contr	ol Equipin	nent- 52	09							
BA-4 O	rdnance Support Equipment													A4NV	
			TOTAL	COST IN T	HOUSANE	S OF DOLL	ARS								
COST	ELEMENT OF COST	ID						FY 2003			FY 2004			FY 2005	
CODE		Code		0 17	T	T + 10 +	0		T	0 17		T	0 "		T
				Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
UK024 UK039	EQUIPMENT RMA MK 86 Night Vision Devices MK 46 OSS Product Improvement											2,222 3,534 6,409			1,93 2,76 6,25
UK5IN	INSTALL Installation of Eqmt FMP (RMA MK 86) Installation of Eqmt NON FMP (RMA MK 86)											292 87			48 5
												12,544			11,48

DD FORM 2446, JUN 86 ITEM NO. 103 PAGE NO. 2

P3A	INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: GFCS MK 86 TYPE MODIFICATION: Mods 9, 10, 12 MODIFICATION TITLE: MK86; Gun Fire Control Equipment ORDALTs

DESCRIPTION/JUSTIFICATION:

Provides Product Capability, Safety, and Survivability with RMA Improvements.

DEVELOPMENT STATUS/MAJOR DEVELO	OPME	NT MILEST	TONE	S:		Continu	uous	Improv	eme	nts to G	FCS	MK 86			_							
	FY:	2002 & Prio	r F	Y 2003	F`	Y 2004	F`	Y 2005	F	Y 2006	F	Y 2007	FY	2008	F۱	<u>/ 2009</u>	F`	Y 2009		TC		<u>TOTAL</u>
	QTY		QTY		QTY		QΤΥ		QΤ\		QTY		QΤ\					\$	QTY	<u>TC</u> \$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						0.0
<u>PROCUREMENT</u>																						
INSTALLATION KITS					13	1.3	11	0.9	7	0.7	7	0.8									38	3.7
INSTALLATION KITS - UNIT COST																						0.0
INSTALLATION KITS NONRECURRING						0.9		1.0		0.7		0.1										2.7
EQUIPMENT																						0.0
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
PRODUCTION SUPPORT																						0.0
OTHER (ILS/TEST SUPPORT)																						0.0
OTHER (CSS)																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST					11	0.4	15	0.5	3	0.4	6	0.2	5	0.2	0	0.0	0	0.0	4	0.5	44	2.2
TOTAL PROCUREMENT						2.6		2.4		1.8		1.1		0.2		0.0		0.0		0.5		8.6

ITEM NO. 103 PAGE NO. 3

CLASSIFICATION: UNCLASSIFIED

3A (Continued)				INDIVID	UAL M	IODIFICA	TION	(Contin	ued)																				
ODELS OF SYSTEMS	AFFECTE	ED:	GFC	CS MK 8	6	_			N	MODI	FICATION	TITL	E: <u>MK86</u>	; Gur	Fire Con	trol Equ	uipment C	RDA	LTs	_									
ISTALLATION INFORMETHOD OF IMPLEME			ALT	ERATIO	N INS	TALLATIO	ON TE	AM (AIT	T)																				
OMINISTRATIVE LEAD	TIME:					_					PRODUC	TION	LEADTIME	:					_										
ONTRACT DATES:	FY 2002		N/A			<del>-</del>					FY 2		N/A			_						FY 20		N/A					
ELIVERY DATE:	FY 2002	2:	N/A	·							FY 2	003:	N/A			_						FY 20	004:	N/A					
													(\$ in Milli																
Cost				r Years				Y 2003			/ 2004		Y 2005		Y 2006		FY 2007			Y 200			Y 2009			Comp		To	tal
			Qty	\$	Qty	\$	Qty	\$	- (	Qty	\$	Qty	\$	Qty	: \$	Qty	\$		Qty		\$	Qty	\$		Qty		\$	Qty	-
RIOR YEARS																													
2001 EQUIPMENT				<u></u>																									
2002 EQUIPMENT				<u> </u>																									
Y 2003 EQUIPMENT										2	0.1																		
Y 2004 EQUIPMENT										9	0.3	4	0.1																
2005 EQUIPMENT												11	0.4																
2006 EQUIPMENT														3	0.	4 4		0.1											
2007 EQUIPMENT																2		0.1											
Y 2008 EQUIPMENT																			5		0.2								
2009 EQUIPMENT				1																									
O COMPLETE				I																									
INSTALLATION SCH	1 [	Y 2002			′ 2003	<del></del>	FV	2004			FY 2005		EV.	2006		- FV	2007			FY 2	2000			- FV	2009		<u>TC</u>		1
& Prior	1 -		3 4			4 1		3	4	1	2 3	4	1 2	3	4 1	2	3	4	1	2	3	4	1	2	3	4	10	TOTAL	
n 0	0		0 0			0 0			0	0	0 0	0	0 0	0	0 0		0	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	-			0 0	0	0	0	0	0 0	0	0 0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	

			BU	DGET ITEM	JUSTIFICATI	ON SHEET					DATE:	
					P-40						Febr	uary 2004
APPROPRIATION/BUDGE	T ACTIVITY:				P-1 ITEM NON	MENCLATURE						-
OTHER PROCUREMEN	,											
<b>BA4: ORDNANCE SUPP</b>	PORT EQUI	IPMENT					1	IATO SEASP	ARROW	523700		
Program Element for Code	B Items:				Other Related	Program Elem	ents					
					Ship Self De	fense 06047	55N Proj 2017	73				
	FY 2002 and Prior	ID Carlo	EV 0000	FV 0004	FV 2005	EV 2006	EV 2007	EV 2000	EV 2000		To	Total
	+	Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		Complete	Program
QUANTITY												
COST (\$M)	\$10.5		40.5	32.6	25.5	40.7	7.0	30.8	14.5		cont	\$202.1
Initial Spares (\$M)	\$0.0		\$0.0	\$0.8	\$2.1	\$1.5	\$0.4	\$0.5	\$0.2		cont	\$5.5

#### PROGRAM OVERVIEW:

NATO SEASPARROW Surface Missile System (NSSMS) NATO SEASPARROW is a Self Defense AAW Shipboard Missile System.

Primary operations consist of:

- Acquiring targets from external or internal designations
- Establishing track data for Engageability Determination and Launcher/Missile Control
- Target Illumination for Missile Guidance
- Missile Firing
- Kill/Survive Assessment

Provides fully automatic operation with provisions for Operator Intervention or Override from the time of Target Designation to Missile Away. The NSSMS consists of a Fire Control System comprised of Directors; a General Purpose Digital Computer; Signal Data Converters; Transmitter Group; Operating Consoles, and an 8 Cell Launcher, which employs the surface launch variant of the Sparrow Missile. The Surface Launch Version (RIM-7) uses a Radar Homing Guidance System, with Target Illumination provided by the shipboard MK91 System Radar Directors.

When NSSMS is combined with the MK23 Target Acquisition System (TAS), they become the AN/SWY-1 Self Defense Surface Missile System for the following U.S. Navy Ships:

AOE/AORs, DD963s, Self Defense Test Ship, and shore based facilities. When the MK23 TAS is combined with RAM it becomes AN/SWY-2 on the LHA's. When NSSMS and TAS and RAM are combined it becomes the AN/SWY-3 on CV/CVNs and LHDs. The NSSMS is a NATO Cooperative Project with 12 participating Governments; Australia, Belgium, Canada, Denmark, Germany, Greece, Norway, The Netherlands, Portugal, Spain, Turkey and the United States. The NSSMS and associated systems of the Cooperative Project were developed, produced and are supported under DoD/MoD level International Memorandum of Understanding (MOU).

FY 2003: Introduces production start-up for the MK57 Mod 10/11 NATO SEASPARROW Surface Missile System (NSSMS) after a two year production break. The funding provides for the procurement of 3 ship sets (one LHD and two CVNs) of the MK57 Mod 10/11 NATO SEASPARROW Surface Missile System (NSSMS) ReArchitecture upgrades. Provides for engineering changes necessary to keep the MK57 Mod 10/11 NATO SEASPARROW Surface Missile System (NSSMS) ReArchitecture upgrades current with technical change requirements and obsolescence issues. The MK57 Mod 10/11 NATO SEASPARROW Surface Missile System (NSSMS) (RNSSMS) creates an open architected system fully compatible with the SSDS MK 2 integrated ship defense suite. This effort consists of replacing the computer complex with state-of-the-art COTS hardware, replacing the Firing Officer Console and Radar Set Console functionality into the Navy standard AN/UYQ-70 display consoles, replacing the Signal Data Processor with state-of-art microprocessors, and upgrading the transmitter to solid state technology. These modifications are part of the overall Maritime Force Protection Package and will allow for full exploitation of the capabilities of the future ESSM, as well as provide reductions in Cost of Ownership and watch station requirements. The RNSSMS modifications will be installed on CV/CVNs, and LHD Class ships. This funding also provides for the U.S. share of consortium efforts.

Installation of RNSSMS will be performed at the shipyards during scheduled availabilities.

DD Form 2454, JUN 86

P-1 SHOPPING LIST ITEM NO. 104 PAGE NO. 1 CLASSIFICATION:

## **CLASSIFICATION:**

BUDGET ITEM JUSTIFICATION SHEE	Т	DATE:
P-40 Continuation		February 2004
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OTHER PROCUREMENT, NAVY/BA4 ORDNANCE SUPPORT EQUIPMENT	NATO SEASPARROW	523700
Program Element for Code B Items:	Other Related Program Elements	
	Ship Self Defense 0604755N Proj 2017	73

## PROGRAM OVERVIEW:

**FY 2004:** The funding provides for the procurement of 1 CVN ship sets of the MK57 Mod 11 NATO SEASPARROW Surface Missile System (NSSMS) ReArchitecture upgrade. It provides for engineering changes necessary to keep the NSSMS ReArchitecture upgrade current with technical change requirements and obsolescence issues.

The MK57 Mod 11 NATO SEASPARROW Surface Missile System (NSSMS) creates an open architected system fully compatible with the SSDS MK 2 integrated ship defense suite. This effort consists of replacing the computer complex with state-of-the-art COTS hardware, replacing the Firing Officer Console and Radar Set Console functionality into the Navy standard AN/UYQ-70 display consoles, replacing the Signal Data Processor with state-of-art microprocessors, and upgrading the

transmitter to solid state technology. These modifications are part of the overall Maritime Force Protection Package and will allow for full exploitation of the capabilities of the future ESSM, as well as provide reductions in Cost of Ownership and watch station requirements. The RNSSMS modifications will be installed on CV/CVNs, with upgrades being procured & installed on existing RNSSMS and CVN 68 Class ships. This funding also provides for the U.S. share of consortium efforts.

Introduction of the Production start-up ORDALT to the GMLS Mk 29 Trainable Launcher in support of a Fleet deployable Evolved SEASPARROW Missile (ESSM). This ORDALT will provide the CV/CVN Class ships with a cost-effective means of employing ESSM. Production Start- Up is scheduled for FY 04. Final development and qualification testing is expected to start with contract award in 3rd Qtr FY 04 and will continue for approximately 15 months to minimize the risk of hardware changes. Suitability Testing will continue into FY 06.

**FY 2005:** The funding provides for the limited production support for REARCH and the U.S. share of NSSMS consortium support. Upgrades procured and installed for existing RNSSMS on LHD 7. Continued production of ESSM Ordalt to the GMLS MK 29 Trainable Launcher.

DD Form 2454, JUN 86 P-1 SHOPPING LIST ITEM NO. 104 PAGE NO. 2

CLASSIFICATION:

WEAPONS SYSTEM COST ANALYSIS DATE: February 2004 P-5 APPROPRIATION/BUDGET ACTIVITY SUBHEAD: P-1 ITEM NOMENCLATURE/SUBHEAD OTHER PROCUREMENT, NAVY **BA4 ORDNANCE SUPPORT EQUIPMENT** A4US NATO SEASPARROW / 523700 TOTAL COST IN THOUSANDS OF DOLLARS FY 2002 COST ELEMENT OF COST ID and Prior FY 2003 FY 2004 FY 2005 CODE Code Total Cost Quantity Total Cost Total Cost Unit Cost Quantity Unit Cost Total Cost Quantity Unit Cost Quantity Unit Cost Total Cost US003 NSSMS IMPROVEMENTS/ 4.182 4.275 4.176 4.217 CONSORTIUM SUPPORT \* US004 MK 91 Rearcheticture System 6.054 35.610 22.822 8.059 MODIFICATION MK 29 GMLS ESSM ORDALT 4.220 2.926 US005 **US900** CSS 0.257 0.338 0.350 0.300 **US5IN EQUIPMENT INSTALLATION** 0.317 0.986 9.951 10.493 40.540 32.554 25.453 CLASSIFICATION:

DD FORM 2446, JUN 86
#REF! ITEM NO. 104 PAGE NO. 3

<sup>\*</sup> Consortium funding not reflected in P-3s

#### CLASSIFICATION:

# **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNIN	G EXHIBIT	(P-5A)				Weapon System		A. DATE		
		` ,				' '			Februa	ary 2004
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NO	MENCLATURE				
OTHER PROCUREMENT, NAVY								SUBHEA	D:	
BA4 ORDNANCE SUPPORT EQUIPMENT						SPARROW				A4US
Cost Element/	QUANTITY	UNIT	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR	AWARD	DATE OF FIRST	SPECS AVAILABLE	DATE REVISIONS
FISCAL YEAR		UNIT COST (000)	OF PCO	DATE	& TYPE	CONTRACTOR AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
FY 03 _1/		(000)								
<u>US004</u>										
MK 91 REARCH	2	CVN-4.75M	NAVSEA	Oct-02	FFP	Raytheon, Ports, Ri	Apr-03	Nov-04	YES	
UPGRADE	1	LHD 3.0M					'			
Transmitter Upgrade	10	1.2M	NAVSEA	Oct-02	FFP	Raytheon, Ports, RI	Mar-03	Oct-04	YES	
AN/UYQ-70 <b>2/</b>	13	300	NAVSEA	<u>2/_</u>	FFP	Lockheed Martin	May-03	Oct-04	YES	
DISPLAY CONSOLE				_		Egan, MN				
FY 04										
US004										
MK 91 REARCH UPGRADE	1	CVN-5.0M	NAVSEA	Jan-04	FFP	Raytheon, Ports, RI	Jan-04	Jul-05	YES	
Transmitter Upgrade	4	1.3M	NAVSEA	Aug-03	FFP	Raytheon, Ports, RI	Jan-04	Jul-05	YES	
AN/UYQ-70 <b>2</b> /	5	300	NAVSEA	2/_	FFP	Lockheed Martin	Jun-04	Jan-05	YES	
DISPLAY CONSOLE						Egan, MN				
MK 91 REARCH UPGRADE TO MOD 10/11 3/	3	2.0M	NAVSEA	Jan-04	FFP	Raytheon, Ports, RI	Jan-04	Jul-05	YES	
<u>US005</u>										
Mk 29 GMLS ESSM OrdAlt - Production	3	1.0M	NAVSEA	Aug-03	FPI	Raytheon, Ports, RI	Jul-04	Feb-06	NO	
<u>FY 05</u>										
<u>US004</u> MK 91 REARCH UPGRADE TO MOD 10/11 <u>3/</u>	1	LHD-2.0M	NAVSEA	Jan-04	FFP	Raytheon, Ports, RI	Jan-06	Jul-07	YES	
MIK 91 KEARCH OPGRADE TO MOD 10/11 31	'	LHD-2.0101	NAVSEA	Jan-04	FFF	Raylileon, Ports, Ki	Jan-06	Jui-07	TES	
US005		4.004	NAV/OF A	A 04	FED	De the experience	1.105	F.1.07	NO	
GMLS Mk29 ESSM OrdAlt - Production	2	1.0M	NAVSEA	Aug-04	FFP	Raytheon, Ports, RI	Jul-05	Feb-07	NO	
<u>-</u>										

<sup>1/</sup> Requires contractor production startup after three year production hiatus. Last production contract in late FY99

DD Form 2446-1, JUL 87

P-1 SHOPPING LIST Classification: UNCLASSIFIED

PAGE NO. 4 ITEM NO. 104

<sup>2/</sup> Part of multicustomer contract.

<sup>3/</sup> Procures upgrades for the MK 57 MOD 6/7 on CVN 68/69/76 & LHD 7 to make them MOD 10/11

CLASSIFICATION:	UNCLASSIFIED
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P3A INDIVIDUAL MODIFICATION

MODIFICATION TITLE:

MODELS OF SYSTEM AFFECTED: NATO SEASPARROW Surface Missile Systems

TYPE MODIFICATION: Performance, Reliability and Safety

**NSSMS MK57 MOD 10/11** 

DESCRIPTION/JUSTIFICATION:

The MK 91 NATO Seasparrow ReArchitecture Program will integrate the NSSMS into the SSDS MK 2 architecture to provide an additional layer of ship missile defense. The upgrade will eliminate the analog point to point architecture and other deficiencies resident to the existing MK 57 NSSMS, as well as allow for full exploitation of ESSM. In addition to reductions in manning realized by RNSSMS, the Solid State Transmitter Ordalt and replacement for the SDP will reduce NSSMS Cost of Ownership for the fleet.

## DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

		2002 & Prior	1	′ 2003	FY	2004	FY	′ 2005	FY	2006	FY	2007	F	/ 2008	FY	′ 200 <u>9</u>	<u>TC</u>	7	OTAL
	QTY		QTY		QTY		QTY		QTY	\$	QTY		QTY		QTY		QTY		\$
FINANCIAL PLAN (IN MILLIONS)																			
RDT&E																			0.0
<u>PROCUREMENT</u>																			
INSTALLATION KITS																			0.0
INSTALLATION KITS - UNIT COST																			
INSTALLATION KITS NONRECURRING											.,								
EQUIPMENT *		2.9	3	28.4	1	11.7			1	13.2	<u>1</u> /		1	14.3			2	26.2	96.7
EQUIPMENT NONRECURRING		6.0		2.2				0.1		6.0				2.6		2.3			19.2
ENGINEERING CHANGE ORDERS		3.0		1.1		1.2		1.3		1.3				0.7		0.7			9.3
SYSTEM UPGRADE <u>2/</u>					3.0	6.0	1	2.0											8.0
TRAINING EQUIPMENT																			0.0
SUPPORT EQUIPMENT																			
OTHER-PRODUCTION SUPPORT		0.9		3.4		3.4		3.4		3.5		1.1		2.3		2.4			20.4
OTHER - CSS		1.0		0.3		0.4		0.3											2.0
OTHER				0.6		0.6		0.6		0.6				0.7		0.7			3.8
INTERIM CONTRACTOR SUPPORT																			
INSTALL COST				0.3		1.0	3	10.0	1	5.0		1.8		0.5	1	4.4	3	13.4	36.4
TOTAL PROCUREMENT		13.8		36.3		24.3		17.7		29.6		2.9		21.1		10.5			195.7

<sup>\*</sup>Reflects Qty of Ship Sets

<sup>1/</sup> Relflects PBD130 which realigned CVN70 from SCN to OPN with all associated costs.

<sup>2/</sup> Procures upgrades for the MK 57 MOD 6/7 on CVN 68/69/76 & LHD 7 to make them MOD 10/11

CLA	SSIFICATIO	ON: <b>UN</b>	ICLA:	SSIF	IED																										
РЗА	(Continued)	)					INDI	VIDU	AL N	MODI	FIC	ATIO	N (Co	ntinu	ed)																
MOD	ELS OF SY	/STEM	IS AFI	FEC	TED		NAT SEA	O SPAF	RRO		MOI	DIFIC	ATIO	N TIT	LE:	NSS	MS M	K57	MOD	10/11										-	
	ALLATION HOD OF IM						Surfa	ace M	Isl Sy																						
	IINISTRATI'							0,01	-	PRO	DU	ICTIO	N LE	ADTI	ME:		18	Мо	nths												
	ITRACT DA			2002					_	FY 2	2003	3:	Apr							: Jan						Jan 05					
DELI	IVERY DAT	E:	FY	2002	2: _				-	FY 2	2003	3:	Nov	04				FY	2004	: Jul (	05			FY 2	2005:	Jul 06					
															(9	\$ in Mi	llions)														
	Cost:				FY	200	02 &	Prior	F`	Y 200	3	F	Y 200	)4	_ \	FY 200			FY	2006	F	Y 200	)7		FY 20	08	-	FY 20	09		total
					Q	ty		\$	Qty	\$		Qty		\$	Qty	;	\$	Qty		\$		Qty		Qty		\$	Qty		\$	Qty	
SYS	TEM UPGR	ADES															0.3	1		1.3	3		1.6							4	3.2
FY	2001 EQUI	PMEN	Γ																												0.0
FY	2002 EQUI	PMEN	Γ																												0.0
FY	2003 EQUI	PMEN	Γ <u>1/</u>								0.3			0.8	2		9.4													2	10.5
FY	2004 EQUI	PMEN	Γ											0.2			0.3	1		3.8										1	4.3
FY	2005 EQUI	PMEN	Г																												0.0
FY	2006 EQUI	PMEN	Γ																				0.2			0.3	1		4.0	1	4.5
FY	2007 EQUI	PMEN	Γ																												
FY	2008 EQUI	PMEN	Γ																							0.2			0.3		0.5
FY	2009 EQUI	PMEN	Γ																										0.2		
ТО	COMPLET	E																												3	11.1
	INSTALLA	TION 9	CHE	ווח	E.																										
	FY 2001		Y 20		_		FY	2003			FΥ	2004			FY	2005		1	FY	2006			FY	2007	7		FY 1	2008		TC	
	& Prior			3	4	1	2	3	4	1	2	3	4	1		3	4	$\parallel$ <sub>1</sub>	2	3	4	1	2	3	4	1	2		4	10	TOTAL
IN	0	0	0	0	0	-	0	0	0		0	0	0	0	- <del></del> 1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	5	8
OUT	0	0	0	0	0		0	0	0			0	0	0	0	0	1	<sub>1</sub>	0	0	1	1	0	0	0	0	0	0	0	5	8
	esign Servi				SA) p					llation	be						ith ful				ing 2									J	
	he FY 05 P													June	06.							•		•							
	<u> </u>													P1 S	SHOP	PING	LIST	ITEN	1 NO	104		PAG	GE 6					P-3A			

3A	INDIVIDUAL MODIFICATION

MODIFICATION TITLE: MK 29 GMLS ESSM ORDALT

MODELS OF SYSTEM AFFECTED: NSSMS MK 29 Launching SYSTEM TYPE MODIFICATION: Performance

DESCRIPTION/JUSTIFICATION:

The objective of this issue is a cost-effective solution to protect CVNs IAW the Navy's Maritime Force Protection (MFP) program for ship's self defense against the future threat of evolving Anti-Ship Cruise Missiles (ASCMs). The Navy's MFP plan calls for these platforms to carry ESSM to provide the required Probability of Raid Annihilation (PRA). The ESSM OrdAlt to the GMLS Mk 29 provides a low cost modification to the current trainable launcher. In conjunction with ESSM, this modification will meet performance requirements for all cited ship classes through the mid-term scenario as defined in the CAPSTONE requirements and the 1999 Report to Congress

DEVELOPMENT STATUS/MAJOR DEVELOPMENT		2002	VLO.		I														
		rior	FY	2003	FY	2004	FY:	2005	FY	2006	FY	2007	FY	2008	FY :	2009		т	C
	QTY		QTY		QTY		QTY				QTY		QTY		QTY		QTY	\$	<u> </u>
FINANCIAL PLAN (IN MILLIONS)																			
RDT&E						8.8		3.0											11.8
PROCUREMENT																			0.0
INSTALLATION KITS																			0.0
INSTALLATION KITS - UNIT COST																			0.0
INSTALLATION KITS NONRECURRING																			0.0
EQUIPMENT					2	2.0	2	2.0	6	6.2			6	6.4			4	4.5	21.1
ORDALT INSTALL @ DEPOT <u>2</u> /							3	0.5	2	0.3	6	1.0			6	1.0	4	0.6	3.4
ENGINEERING CHANGE ORDERS						0.1		0.1		0.1		0.1		0.1		0.1		cont	0.6
DATA																			0.0
TRAINING EQUIPMENT - LBTS (1 LAUNCHER)					1	1.0													1.0
SUPPORT EQUIPMENT																			0.0
OTHER-PRODUCTION SUPPORT						1.1		0.3		0.3		0.3		0.3		0.3		cont	2.6
OTHER - CSS																			0.0
OTHER																			0.0
INTERIM CONTRACTOR SUPPORT																			0.0
INSTALL COST 1/									2	0.2	2	0.2	4	0.4	2.0	0.2	4	0.4	1.4
TOTAL PROCUREMENT		0.0		0.0		4.2		2.9		7.1		1.6		7.2		1.6		5.5	30.1

<sup>1/</sup> Reflects cost of installing ORDALTs into launcher prior to ship installation.

<sup>2/</sup> Reflects cost to upgrade CVN68 from MOD 7 to MOD 11 Baseline. This upgrade is necessary to fire ESSM Missiles.

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: MODIFICATION TITLE: NATO MK 29 GMLS ESSM ORDALT

SEASPARROW INSTALLATION INFORMATION: Surface Msl Sys

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 15 Months

FY 2004: CONTRACT DATES: Jan 04 FY 2005: Jan 05

FY 2006: Jan 06 FY 2007: Jan 07 FY 2007: Jul 08 DELIVERY DATE: FY 2004: Jul 05 FY 2005: Jul 06 FY 2006: Jul 06

(\$ in Millione)

							(\$ 1	n Millions)											
Cost:	FY 200	02 & Prior	FY 20	03	F١	Y 2004	F	Y 2005		FY 2006		FY 2007		FY 2008	-	FY 2009		total	
	Qty	\$	Qty :	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty		
PRIOR YEARS																			
FY 2001 EQUIPMENT																			
FY 2002 EQUIPMENT																			
FY 2003 EQUIPMENT																			
FY 2004 EQUIPMENT *									2	0.2							2		0.2
FY 2005 EQUIPMENT											2	0.2					2		0.2
FY 2006 EQUIPMENT													4	0.3			4		0.3
FY 2007 EQUIPMENT															2	0.2	2		0.2
FY 2008 EQUIPMENT																			
FY 2009 EQUIPMENT																			
TO COMPLETE																	10		8.0

<sup>\*</sup> Equipment = Ship Sets - Cost reflects work done on ship for installing MK 29 ESSM ORDALT.

## INSTALLATION SCHEDULE:

		FY 2002	<u>F</u>	Y 2002				FY 2	2003			FY	2004			FY	2005			<u> </u>	Y 2006	<u>3</u>		FY	2007			FY 2	2008		TC	
		& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	<u>1</u>	<u>3</u>	<u>3</u>	<u>4</u>	1	2	3	4		TOTAL
ı	IN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	1	1	0	0	5	10
d	OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	5	10

	BUDG	ET ITEM JUSTIFICA	TION SHEET				DATE:			
		P-40						FEBRU/	ARY 2004	
-					P-1 ITEM NOM	IENCLATURE				
RDNANCI	E SUPPORT	EQUIPMENT				Rollin	ng Airframe N	lissile (RAM)	5238	
B Items:					Other Related I	Program Elemei	nts			
Prior Years	ID Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
65	A	6	2	0	8	8	2	0	3	94
518.8	А	27.1	31.1	23.0	78.0	69.8	34.8	11.0	63.8	857.4
)	RDNANC B Items:  Prior Years  65	T ACTIVITY ENT, NAVY RDNANCE SUPPORT B Items:  Prior ID Years Code  65 A	P-40     T ACTIVITY     ENT, NAVY     RDNANCE SUPPORT EQUIPMENT     B Items:   Prior	P-40  T ACTIVITY ENT, NAVY RDNANCE SUPPORT EQUIPMENT  B Items:  Prior ID Years Code FY 2003 FY 2004  65 A 6 2	T ACTIVITY   SINT, NAVY   RDNANCE SUPPORT EQUIPMENT	P-40   P-1   ITEM NOW   P-1   ITEM NOW	P-40   P-1   ITEM NOMENCLATURE   P-1   ITE	P-40   P-1   ITEM NOMENCLATURE   P-1   ITE	P-40   P-1	P-40   P-1   ITEM NOMENCLATURE   P-1   ITE

# Rolling Airframe Missile (RAM) - MK-49 Guided Missile Launching System (GMLS)

RAM is a NATO cooperative project with the Federal Republic of Germany, produced under a series of production MOUs/MOAs executed between the U.S. and the Federal Republic of Germany. The latest was signed on 18 December 2001.

The MK-31 Guided Missile Weapons System (GMWS) is a lightweight, quick-reaction, high firepower missile system designed to provide anti-ship missile defense. The system is comprised of a MK-44 Guided Missile Round Pack (GMRP) and the MK-49 Guided Missile Launching System (GMLS), which holds 21 RAM missiles. The 21-round launcher is compatible with various platforms ranging from large USN aircraft carriers to S-143 type German patrol boats. This system is designed to counter high density anti-ship, cruise missile raids and provide for ship survivability with accurate terminal guidance, proven lethality and no fire control channel dependence. The SeaRAM configuration, which holds 11 RAM missiles, provides Anti-Air Warfare and Anti-Surface Warfare mission capability with a multi-spectral detect, control and engage system.

Approval for Full Rate Production was granted 6 May 1993. The total RAM GMLS procurement program is 188 launchers (94 OPN (including one trainer, one LBTF, and 21 SeaRAM configured systems), 41 SCN, and 53 German systems). One hundred eight launchers (56 OPN, 9 SCN and 43 German) were procured in FY99 and prior, under joint U.S./German production contracts. A five year multi-year contract for 45 systems (17 OPN and 28 SCN) was awarded in FY00; ten German systems were added to the multi-year in April 2002; two SCN launchers were added in FY03; and the remaining 23 launchers (two SCN and 21 OPN) are scheduled for procurement outside the multi-year contract.

P-1 SHOPPING LIST ITEM NO. 105 PAGE NO. 1

BUDGET ITEM JUSTIFICATION SHEET	DA	ATE:	
P-40 (CONTINUATION)	FE	EBRUARY 2004	
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATU	JRE/LINE ITEM #	
OTHER PROCUREMENT, NAVY			
BA-4 : ORDNANCE SUPPORT EQUIPMENT	Rolling Airfr	rame Missile (RAM)	5238

RAM is installed on or planned for installation on the following ship classes:

<u>SHIPS</u>	<u>LAUNCHERS</u>
5	10
11	23 (LSD-52 (1 OPN & 1 SCN))
11	11
4	8
2	4
7	15
21	21
	1
	1_
61	94 **(Only 92 shipboard installations)
1	1 (LSD-52 (1 OPN & 1 SCN))
4	8
4	8
12_	24_
21	41
	5 11 11 4 2 7 21 61 1 4 4 4 12

The NSWC Port Hueneme provides installation oversight support as the ISEA for the RAM system. RAM is/will be installed on LHA, LSD, LHD, DD-963, CV/CVN, FFG and LPD ship classes.

\*FFGs will receive SeaRAM configuration.

DD Form 2454, JUN 86

Note: No funds were received through the Emergency Response Fund, Defense (ERF,D).

P-1 SHOPPING LIST ITEM NO. 105 PAGE NO. 2

#### **SEA01 SUBMIT TO FMB**

								OBIVITI TO					T		
	WEAPONS SYSTEM C P-5	OST AI	NALYSIS			Weapon Sy	rstem							EERDIIA	RY 2004
APPROPE	RIATION/BUDGET ACTIVITY					ID Code	P-1 ITEM N	OMENCLATUR	RE/SUBHEAD				SUBHEAD:	FEDRUA	IN 1 2004
	PROCUREMENT, NAVY					ID CCCC	1112011	OWE NOE NO	(E/OODI IE/(D				OODI ILIND.		
	RDNANCE SUPPORT EQUIPMENT						ROLLING	AIRFRAME	MISSILE	(RAM) 52	38			A4UR	
			TOTAL COST II	N THOUSA	NDS OF DOL	LARS									
COST	ELEMENT OF COST	ID	Prior					FY 2003			FY 2004			FY 2005	
CODE		Code	Years	0 "	11.70	T	0 "		T	0 17		T	0 "	T 11 '' O '	T
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	Sponsor: N86														
UR006	RAM MK-49 GMLS (Annual Procurement)	Α	274,239												
UR006	Multiyear RAM MK-49 GMLS	Α	35,600				6	3923.00	23,538	2	4011.00	8,022			
UR006	Multiyear RAM EOQ Material	Α	15,536						(11,622)			(3,914)			
UR006	RAM 11 Round GMLS	Α	5,543												
UR006	RAM ECP's	Α	36,235						1,797			1,561			1,174
UR006	SEARAM Production NRE/PLI Testing	Α	0												
UR006	RAM GMLS ORDALTS	Α	14,105				2	533.29	1,067	10	805.20	8,052			
UR006	SEARAM System	Α	0												
UR777	RAM ENGINEER SERVICES (Contractor)	Α	29,183						2,948			3,300			3,423
UR007	RAM GMLS PRODUCTION SUPPORT	Α	39,745						3,432			4,383			4,473
UR900	RAM - CSS	Α	7,472						1,026			545			557
UR006	RAM GMLS/ORDALT Install (Non-FMP)	Α	556						1,095			142			750
UR5IN	RAM GMLS AIT Install (FMP)	Α	60,590						3,834			8,977			12,591
UR5IN	SEARAM AIT Install (FMP)	Α													
	2446 II IN 96		518,804						27,115			31,068			22,968

DD FORM 2446, JUN 86

	WEAPONS SYSTE P-5 (Co	EM COST ontinued)	ANALYSIS	3			Weapon Sy	/stem							DATE: <b>FEB</b>	RUARY	2004
	PRIATION/BUDGET ACTIVITY Procurement, Navy						ID Code	P-1 ITEM	NOMENCLA	ATURE/SUBH	HEAD				SUBHEAD:		
BA-4: (	DRDNANCE SUPPORT EQUIPMENT	1							Rolling A	Airframe M	issile (R	AM) 5238				A4UR	
COST	ELEMENT OF COST		FY 2006			FY 2007			FY 2008			FY 2009		То	Complete		Total
		Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Cost	Quantity	Cost
	Sponsor: N86																
UR006	RAM MK-49 GMLS (Annual Procurement)															55	274,239
UR006	Multiyear RAM MK-49 GMLS															17	67,160
UR006	Multiyear RAM EOQ Material																
UR006	RAM 11 Round GMLS															1	5,543
UR006	RAM ECP's													N/A	3,722		48,480
UR006	SEARAM Production NRE/PLI Testing																4,000
UR006	RAM GMLS ORDALTS													6	5,838	48	34,525
UR006	SEARAM System													3	23,850	21	152,719
UR777	RAM ENGINEER SERVICES (Contractor)													N/A	9,993		61,265
UR007	RAM GMLS PRODUCTION SUPPORT													N/A	13,738		82,844
UR900	RAM - CSS													N/A	1,864		13,779
UR006	RAM GMLS/ORDALT Install (Non-FMP)													6	818	48	4,648
UR5IN	RAM GMLS AIT Install (FMP)															71	90,053
UR5IN	SEARAM AIT Install (FMP)													5	3,948	21	18,121
															63,771		857,376

P-1 SHOPPLING LIST ITEM NO. 105 PAGE NO. 3A

BUDGET PROCUREME	NT HISTOR	RY AND PLA	ANNING EXHIBIT (	P-5A)		Weapon System		a. date <b>FE</b> I	BRUARY	2004
. APPROPRIATION/BUDGET AC OTHER PROCUREMEN BA/4: ORDNANCE SUF	T, NAVY	JIPMENT			C. P-1 ITEM NOME	ENCLATURE RFRAME MISSILE (RAM	) 5238		SUBHEAD	UR
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE*	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
UR006 FISCAL YEAR (03) RAM GMLS (MK-49)	6	3,923	NAVSEA	N/A	SS/FPM-5(4)	Raytheon Company, Louisville, KY	11/02	01/05	YES	
UR006 FISCAL YEAR (04) RAM GMLS (MK-49)	2	4,011	NAVSEA	N/A	SS/FPM-5(5)	Raytheon Company, Louisville, KY	11/03	10/05	YES	

#### D. REMARKS

The RAM Multiyear Procurement contract was awarded in FY00; subsequent years (through FY04) do not have award dates, but rather the date of funding for that fiscal year's buy. The Multiyear contract is for a mix of OPN and SCN launchers.

DD Form 2446-1, JUL 87

P3A	INDIVIDUAL MODIFIC	ATION			FEBRUARY 2004
	ROLLING AIRFRAME MISSILE (RAM)	TYPE MODIFICATION:	MK-49 GMLS	MODIFICATION TITLE:	
DESCRIPTION/ ILISTIFICAT	LIUN:		•		

The Rolling Airframe Missile is a lightweight, quick-reaction, high firepower missile system designed to provide anti-ship missile defense. The system (MK-31 GMWS), is comprised of a MK-44 Guided Missile Round Pack (GMRP) and the MK-49 Guided Missile Launching System (GMLS), which holds 21 RAM missiles. The 21-round launcher is compatible with various platforms, ranging from large USN amphibious assault ships to S-143-type German patrol boats. This system is designed to counter high density anti-ship, cruise missile raids and provide for ship survivability with accurate terminal guidance, proven lethality and no fire control channel dependence. The SeaRAM configuration, which holds 11 RAM missiles, provides Anti-Air Warfare and Anti-Surface Warfare mission capability with a multi-spectral detect, control and engage system.

DEVELOPMENT STATUS/MAJOR DEVELO	PMENT	MILESTON	ES:		Mile	stone III,	Janu	ary 2000	)			•									
		02 & Prior	<u>F</u>	Y 2003	<u>F</u>	Y 2004	<u>F</u>	′ 200 <u>5</u>	FY	2006		2007	<u>F</u> )	<u>/ 2008</u>	<u>F</u>	2009			<u>TC</u>	TC	<u>DTAL</u>
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																					
RDT&E																					
<u>PROCUREMENT</u>																					
INSTALLATION KITS	24	14.7	2	2.2	10	8.2	0	0.8	5	5.0	1	1.6	0	0.1	0	0.0		6	6.7	48	39.2
INSTALLATION KITS - UNIT COST		0.6		0.5		0.8		0.0		0.9		1.0		0.0		0.0			1.0		
INSTALLATION Kits/GMLS		0.6		1.1		0.1		0.8		0.5		0.6		0.1		0.0			8.0		4.6
EQUIPMENT	65	315.4	6	23.5	2	8.0	0	0.0	8	56.3	8	57.3	2	15.3	0	0.0		3	23.9	94	499.7
EQUIPMENT NONRECURRING																					
ENGINEERING CHANGE ORDERS		36.2		1.8		1.6		1.2		0.9		1.0		1.2		0.8			3.7		48.5
SEARAM NRE/PLI TESTING								0.0		4.0											4.0
TRAINING EQUIPMENT																					
SUPPORT EQUIPMENT																					
ENGINEERING SERVICES (Contractor)		29.2		2.9		3.3		3.4		3.0		3.1		3.1		3.2			10.0		61.3
PRODUCTION SUPPORT		39.7		3.4		4.4		4.5		4.1		4.2		4.3		4.4			13.7		82.8
ECONOMIC ORDER QUANTITY		15.5		-11.6		-3.9		0.0		0.0		0.0		0.0		0.0			0.0		0.0
INTERIM CONTRACTOR SUPPORT		7.5		1.0		0.5		0.6		0.6		0.6		0.6		0.6			1.9		13.8
INSTALL COST	57	60.6	2	3.8	4	9.0	6	12.6	2	4.1	2	2.0	8	10.1	8	2.0		5	3.9	94	108.2
TOTAL PROCUREMENT		518.8		27.1		31.1		23.0		78.0		69.8		34.8		11.0			63.8		857.4

P-1 SHOPPING LIST ITEM NO. 105 PAGE NO. 5

P3A (Continued)					INDI	VIDUAI	L MC	DDIFICATI	ON (C	ontinued)									F	EBRU/	ARY	200	)4					
					Roll	ling Air	fran	ne Missile	(RAM	) MK-49 G	MLS	_								MODIF	ICAT	ION	I TITL	Æ:				
INSTALLATION IN	NFORM	ATIOI	N:																									
METHOD OF IMPI	LEMEN	TATIO	ON:		Ship	oyard/A	IT																					
ADMINISTRATIVE					onths					LEADTIME	≣:		21	Mon		=\												
CONTRACT DATE DELIVERY DATE:		FY 2 FY 2		11/0 01/0		-		FY 2004: FY 2005:		11/03 10/05	_					FY 20		-		_								
						-					_	/¢in∃	Millions	١						_								
Cost:		FY20	002 & Prior	F	Y 200	03	F	Y 2004	F	Y 2005		FY 20			Y 200	7	F	Y 2008	F	Y 2009					To C	omplete		Total
		Qty	\$	Qty	_		Qty	\$	Qty	\$	Qty		\$	Qty	\$		Qty	\$	Qty	\$					Qty	\$	Qty	\$
FY02 & PRIOR Y	/EAR	57	60.6	2		3.8	4	9.0		0.0	)		0.0			0.0		0.0		(	0.0						63	73.4
FY 2003 EQUIPM	MENT								6	12.6	6 0		0.0	0		0.0	0	0.0	0	(	0.0						6	12.6
FY 2004 EQUIPM	MENT								0	0.0	) 2		4.1														2	4.1
FY 2005 EQUIPM	MENT								0	0.0	0		0.0	0		0.0												0.0
FY 2006 EQUIPM	MENT															2.0	8	4.6									8	6.6
FY 2007 EQUIPM	MENT																6	5.5	2		1.5						8	7.0
FY 2008 EQUIPM	MENT																		0	(	0.5				2	1.2	2	1.7
FY 2009 EQUIPM	MENT																											0.0
TO COMPLETE																									3	2.7	3	2.7
TOTAL		57	60.6	2		3.8	4	9.0	6	12.6	3		4.1	0		2.0	14	10.1	2	2	2.0				5	3.9	92	108.1
INSTALLATION	N SCHE	DULE	<u>:</u> :																									
FY 2	2002		FY 200	3			FY 2	2004		FY 2005			FY 2	006			FY 2	2007		FY 20	08			FY	2009		TC	
&	Prior	1	2	3	4	1	2	3 4	1	2 3	4	1	2	3	4	1	2	3 4	1	2	3	4	1	2	3	4		TOTAL
In :	57	2	0	0	0	2	2	0 0	0	3 3	0	2	0	0	0	0	0	0 0	0	5	5	4	2	0	0	0	5	92
Out	57	0	2	0	0	0	2	2 0	0	0 3	3	0	2	0	0	0	0	0 0	0	3	3	3	3	2	2	0	5	92
																								<b>5</b> 0 ·				
																								P-3A	ı			

P-1 SHOPPING LIST ITEM NO. 105 PAGE NO. 6

FY 2004/5 BUDGET PRODUC	TION S	CHE	DULE,	P-21														DATE			F	ĒВF	₹UA	<b>NRY</b>	20	04				
APPROPRIATION/BUDGET AGOTHER PROCUREMENT, NA			и GMI	_S									Wea	apon R <i>F</i>		stem			ITEI I MK-			ENC	LAT	URE						
							Pro	oduct	ion l	Rate						cure														
Item			nufactu and L	ırer's ocatio	n	M	SR	1-8	3-5	MA	XΑ		T P			T Af Oct 1			Initia fg Pl			der Ifg P	LT		Tota	ıl		Uni Mea	it of Isure	
RAM MK-49 GMLS	Raythe	eon Cor	mpany,l	_ouisvill	e, KY	8		12		24									21			21								
SEARAM Systems	Raythe	eon Cor	mpany,	Louisvi	lle, KY	8		12		24									21			21								
											FISC	AL YE	AR 20	002								FISC	CAL Y	EAR 2	2003					_
ITEM / MANUFACTURER	F	S	Q	D	В		2001					_	CALE	NDAR	YEAF	R 2002							CA	LEND	AR YI	EAR 2	003			
	Y	C	T Y	E L	A L	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	J J	A U G	S E P	B A L
RAM MK-49 GMLS (Multiyear)	02	N	4	0	4		Α																							4
RAM MK-49 GMLS (Multiyear)	03	N	6	0	6															Α										6
										FIGO	A1 \/F	AR 2	004									FIGO	241.34	EAR 2	2005					
ITEM / MANUFACTURER	F	s	Q	D	В		2003			FISC	AL YE			NDAR	YFAR	R 2004	1					FISC		LEND		=AR 2	005			ĺ
	Y	V C	T Y	E L	A L	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J L	A U G	S E P	B A L
RAM MK-49 GMLS (Multiyear)	02	N	4	0	4		1	1	1	1																				0
RAM MK-49 GMLS (Multiyear)	03	N	6	0	6																1	1	1	1	1	1				0
RAM MK-49 GMLS (Multiyear)	04	N	2	0	2		A																							2
Remarks:			<del></del>	<u> </u>					1		i .														1					<b>—</b>

DD Form 2445, JUL 87 311 / 244

Previous editions are obsolete

ete P-1 SHOPPING LIST ITEM NO. 105 PAGE NO. 7 Exhibit P-21 Production Schedule

FY 2004/05 BUDGET PRODU	CTION	SCHE	DULE	, P-2	1													DATI			FEE	3RL	JAF	<b>RY</b> 2	200	4				
APPROPRIATION/BUDGET A OTHER PROCUREMENT, NA			/I GML	_S									Wea <b>RAM</b>		Sys	stem			ITEI 1 MK-			NC	LAT	URE	: R/	M				
							Pro	duct	ion I	Rate					Pro	cure	emei	nt Le	eadtir	nes										
Item MK-49 GMLS		Name		ırer's ocatio Louisvi		MS	SR	1-8 12	3-5	MA 24	ΑX		T Pr Oct			T A			Initia lfg Pl 21			eord Ifg P 21			Tota	al			it of asure	
WIT TO GIVE	rayınc	2011 001	прапу,	Louisvii	10, 111	Ŭ	-																							
SEARAM Systems	Raythe	on Cor	npany,	Louisvi	lle, KY	8		12		24									21			21								
						FI	SCAL	YEAR											FISC		EAR									
ITEM / MANUFACTURER	F Y	S V	Q T	D E	B A		2005			_			CALEN					_		_		_	1	1		EAR 2	2007	Τ,		В
	·	Ċ	Y	L	Ĺ	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	J J	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	U L	A U G	S E P	A L
RAM MK-49 GMLS (Multiyear)	04	N	2	0	2	1	1																							0
SEARAM Systems	06	N	8	0	8						Α																	+		8
<u> </u>																														
SEARAM Systems	07	N	8	0	8					=100								Α				5100								8
ITEM / MANUFACTURER	F	s	Q	D	В		2007			FISC	CAL Y	EAR 2	2008 CALEN	IDAR	VEAR	2 200	Ω					FISC		EAR		EAR 2	nna			l
TEM, MARKET, CORE	Y	V C	T Y	E L	A L	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L
						·	v	Ü						.,		Ü		Ċ	V				IX.			13	Ė		•	
SEARAM Systems	06	N	8	0	8				1	2	2	1	2															-		0
SEARAM Systems	07	N	8	0	8									2	1	2	1	2										$\perp$		0
SEARAM Systems	08	N	2	0	2		Α																					<del>-</del>		2
Remarks:																														
Remarks.																														

DD Form 2445, JUL 87 311 / 244

Previous editions are obsolete

olete P-1 SHOPPING LIST ITEM NO. 105 PAGE NO. 8 Exhibit P-21 Production Schedule

		BUDG	ET ITEM JU	STIFICATIO	N SHEET			DATE:				
			F	P-40					FE	<b>EBRUARY 2</b>	004	
APPROPRIATION/B	UDGET ACTIV	/ITY				P-1 ITEM NOM	IENCLATURE					
OTHER PROCU	REMENT, N	AVY/BA	<b>\4</b>				SHI	P SELF DEF	ENSE SYSTE	M (SSDS) /	5239	
Program Element for	r Code B Items	:				Other Related	Program Eleme	ents				
						P.E. 060475	55N					
	FY2002	ID									То	
	And Prior	Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TBD	Complete	Total
QUANTITY	15	Α	4	3	1	0	0	0	1	0	10	34
COST												
(In Millions)	\$175.3	Α	\$45.3	\$57.7	\$42.1	\$15.6	\$7.4	\$8.1	\$23.7	\$0.0	\$308.8	\$684.1
SPARES COST (In Millions)	\$7.9	Α	\$5.5	\$1.6	\$0.0	\$1.0	\$0.7	\$1.0	\$0.3	\$0.0	Continue	Continue

SHIP SELF DEFENSE SYSTEM (SSDS) - Funds are requested to procure an evolutionary SSDS for selected ship classes. The SSDS is a coordinated engineering approach to improve ship self defense utilizing existing and planned defensive systems in Navy ships. The program coordinates the efforts of diverse acquisition programs that are in varying stages of programmatic maturity. A multi-phased acquisition program has been planned. The AN/SYQ-17 Rapid Anti-Ship Missile Integrated Defense System program, or SSDS MK 0, is being followed by SSDS MK1 program to integrate sensors and automate engagement sequences of hardkill and softkill systems. The next phase is identified as SSDS MK2.

SSDS MK 0 uses ruggedized computer workstations and an ETHERNET LAN and provides decision support to weapons systems operators and managers using data from AN/SLQ-32 and CIWS radar. SSDS MK 0 is designated for use on DD 963/FFG 7 class ships. During FY01-04, implementation of Commercial Off the Shelf technology refresh upgrade is planned for the FFG 7 class ships as Field Change Kits.

SSDS MK 1 is the second phase of acquisition of improved ship self defense capabilities against Anti-Ship Cruise Missiles (ASCM) for LSD 41/49 class ships. It integrates several existing standalone sensor and Anti-Air Warfare weapons systems to provide an automated detect-to-engage capability against low flying, high speed ASCMs with low radar cross sections in the littoral environment. System design emphasizes physically distributed non-developmental items, commercial standards, Next Generation Computer Resources, and computer program reuse in an open architecture computer network. It includes a command table that uses components of the Navy's AN/UYQ-70 standard display for human-machine interface, commercially available local area network access units and circuit cards, and commercially available fiber optic cabling. SSDS MK1 successfully completed Operational Evaluation in June 1997. SSDS received Milestone III Approval for Full Rate Production (Mar 98) and authority to continue integration with Advanced Combat Direction System (ACDS) and Cooperative Engagement Capability (CEC) on CV(N), LPD-17, and LHD ship classes.

SSDS MK 2 development will adopt the functionality of ACDS and combine the SSDS MK1 capability with weapon and sensor elements. In addition, MK2 will fully integrate with CEC to improve joint interoperability for Aircraft Carriers and Amphibious Ships. It provides enhanced capabilities for Force Protection against air, surface, and subsurface threats using both own-ship and remote data in support of the AAW Capstone Requirements. MK2 will increase operational capabilities, improve combat readiness and Battle Group Interoperability, and promote standardization both within installed ship classes and with AEGIS to facilitate transition to Common Command and Decision. SSDS MK 2 also equips all backfit LHDs and CV(N)s with an upgraded Combat System Display Suite which includes AN/UYQ-70s, Automatic Status Boards (ASTABS), Remote ASTAB Controllers, Advanced Sensor Distribution System and a backup Sensor Integration And Control Interface Terminal. A shore based SSDS MK 2 equipment suite and a full combat system suite is installed at the Ship Combat System Center (SCSC). This facility, under the sponsorship of PEO(IWS), is established at Wallops Island to provide a high fidelity combat system engineering development and integration test site in support of the combat systems of the CVN/LPD-17 and future ships and require immediate replacement. In FY03/FY04 procurement funds support the CVN 68, LHD 7, Self Defense Test Ship (SDTS), CV 67, and CVN 74 ships, of which three are ACDS Block 1 Ships and require immediate replacement. In FY05 procure CVN 75, FY06-FY08 will conduct COTS Tech Refresh to previously installed baselines and in FY09 procure the CVN 73, reducing the number of antiquated systems deployed on our carriers. Emergency Response Fund, Defense funding.

P-1 SHOPPING LIST 106

PAGE NO. 1

CLASSIFICATION:

DD Form 2454. JUN 86

UNCLASSIFIED

CLASSIFICATION:

**UNCLASSIFIED** 

	WEAPONS SYSTE	M COST A -5	NALYSIS			Weapon Sy	stem							DATE: FEBRUA	RY 2004
APPROF	RIATION/BUDGET ACTIVITY					ID Code	P-1 ITEM N	OMENCLATU	RE/SUBHEAD	)			l		
Other P	rocurement, Navy/BA4														
	1	1					SHIP SE	LF DEFENS	E SYSTEM	I (SSDS) /	44UQ / 5239	9			
			TOTAL COST IN	THOUSAN	DS OF DOLLA	RS									
COST	ELEMENT OF COST	ID	FY2002		FY 2003			FY 2004			FY 2005				
CODE		Code	And Prior Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quanity	Unit Cost	Total Cos
	SPONSOR N86														
	EQUIPMENT	A													
UQ001/8	SSDS Full Combat System Suite														
	LSD		47,863	0	0	0	0	0	0	0	0	0			
	LHD		0	1	9,489	9,489	0	0	0	0	0	0			
	CV(N)		6,106	1	4,859	4,859	2	16,160	32,320	1	16,681	16,681			
	SHOREBASED		20,219	2	4,593	9,185	1	15,121	15,121	0	0	0			
	SUPPORT EQUIPMENT		14,925	0	0	0	0	0	0	0	0	0			
UQ002	SSDS PRODUCTION SUPPORT		26,242			4,419			2,366			2,408			
UQ003	SSDS ECP		3,004			220			0			0			
UQ004	SSDS TRAINING		9,428			3,182			528			586			
UQ005	SSDS COTS REPLACEMENT		5,204			9,219			2,434			851			
UQ008	COMBAT SYSTEM DISPLAY SUITE		0			534			0			0			
	INSTALL														
UQ51N	SSDS Equipment Install (FMP)		32,635			905			4,169			15,264			
UQ6IN	EQUIPMENT INSTALL (NON-FMP)		4,697			3,326			720			6,340			
* Includes	FY 02 Cong. Add for NULKA Decoys		5000			0									
DD FODA	2446, JUN 86	D 4 CU	<b>175,323</b> OPPING LIST 10	4		45,338	3		57,658	1		42,130 CLASSIFICA	TIONI		

PAGE NO. 2

#### **UNCLASSIFIED** CLASSIFICATION:

<b>BUDGET PROCUREM</b>	ENT HISTO	DRY AND	PLANNING EXHIBI	T (P-5A)		Weapon System		A. DATE		
								FI	EBRUARY 2	2004
B. APPROPRIATION/BUDGET	ACTIVITY				C. P-1 ITEM NOM	ENCLATURE			SUBHEAD	
Other Procurement, Na	avy/BA4								A4	ĮUQ
						EFENSE SYSTEM (SSE	OS) / 5239			
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FISCAL YEAR (03)			NAVSEA	01/03	FFP / CPAF	RAYTHEON	5/03		YES	N/A
LHD 7 (UQ001/8)	1	9,489	(R1)			8680 Balboa Avenue		i 26 mos (R3	)	
CVN 68 (UQ001/8)	1	4,859	(R2)			San Diego CA 92123		12 mos		
SHORE (UQ001/8)	2	4,593						12 mos		
					FFP	LOCKHEED MARTIN				
						MISC. VENDORS	VARIOUS	VARIOUS	YES	N/A
FISCAL YEAR (04)				10/03		RAYTHEON	01/04	12 mos.	YES	N/A
Self Defense Test Ship	1	15,121	NAVSEA			8680 Balboa Avenue		after		
(SDTS) (UQ001)		•				San Diego CA 92123		award		
CVN (UQ001)	2	16,160	NAVSEA		FFP	LOCKHEED MARTIN	VARIOUS	VARIOUS	YES	N/A
FISCAL YEAR (05)				10/04	FFP	RAYTHEON	01/05	12 mos.	YES	N/A
CVN (UQ001)	1	16,681	NAVSEA			8680 Balboa Avenue		after		
, ,						San Diego CA 92123		award		
			NAVSEA	N/A	FFP	LOCKHEED MARTIN	VARIOUS	VARIOUS	YES	N/A

#### D. REMARKS

P-1 SHOPPING LIST 106 Classification: DD Form 2446-1, JUL 87

> UNCLASSIFIED PAGE NO.

Overall Note: Government Furnished Equipment (GFE) is included with unit cost above.

Remark 1: Unit price only refects a partial SSDS MK 2 equipment suite; AN/UYQ-70s will only require upgrade kits.

Remark 2: Unit price only refects a partial SSDS MK 2 equipment suite; two remaing multi-LAU cabinets to procure versus six, and display suite ECPs.

Remark 3: Equipment will be sent to Raytheon Lab FY 04 then delivered to Ship FY 07.

CLASSIFICATION:	UNCI	ASSIF	IFD
JEROGIFICATION.	CIACE	AUUII	

P3A INDIVIDUAL MODIFICATION FEBRUARY 2004

MODELS OF SYSTEM AFFECTED: SHIP SELF DEFENSE SYSTEM (SSDS) TYPE MODIFICATION: Ship Self Defense System MK 2 MODIFICATION TITLE:

#### DESCRIPTION/JUSTIFICATION:

Implements an evolutionary acquisition of improved ship self defense capabilities against Anti-Ship Cruise Missiles for selected non-AEGIS ships by integrating existing programmed Anti-Air Warfare stand alone

It provides an automated quick reaction and multi-target engagement capability emphasizing performance in the littoral environment. Integration focuses on coordinating existing sensor information, providing threat identification and evaluation, assessing defensive readiness, and recommending optimized defensive tactical response to counter single and multiple Anti-Ship Cruise Missile attacks.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone III decision approved 5 March 1998

	FY 200 QTY	2 & Prior \$	<u>FY 2</u> QTY		<u>FY</u> QTY	2004 \$	<u>FY</u> QTY	2005 \$	<u>FY</u> QTY	<u>′ 2006</u> \$	<u>FY</u> QTY	2007 \$	<u>FY</u> QTY	<u>′ 2008</u> \$	<u>FY</u> QTY	2009 \$	QTY	<u>ГВD</u> \$	QTY	<u>TC</u> \$	QTY <u>T</u>	OTAL \$
FINANCIAL PLAN (IN MILLIONS)																						
<u>RDT&amp;E</u>	0	306.2	0	51.3	0	36.6	0	45.7	0	11.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	450.8
<u>PROCUREMENT</u>	15.0	89.2	4.0	23.5	3	47.4	1	16.7	0	0.0	0	0.0	0	0.0	1	17.9	0	0.0	10	150.6	34	345.3
INSTALLATION KITS																					0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0	0	0.0
EQUIPMENT	11	54.1	2	14.3	2	32.3	1	16.7	0	0.0	0	0.0	0	0.0	1	17.9	0	0.0	9	146.1	26	281.4
EQUIPMENT NONRECURRING																			0	0.0	0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0	0	0.0
DATA																			0	0.0	0	0.0
TRAINING EQUIPMENT	2	12.0	1	2.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	4.5	4	18.7
SUPPORT EQUIPMENT	2	23.1	1	6.9	1	15.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	45.2
OTHER (Production Support)		26.3		4.4		2.4		2.4		1.0		1.0		1.0		2.6	0	0.0	0	25.0	0	66.0
OTHER (ECP)		3.0		0.2		0.0		0.0		0.0		0.0		0.0		0.0	0	0.0	0	0.0	0	3.2
OTHER (Training)		9.4		3.2		0.5		0.6		0.0		0.0		0.0		0.6	0	0.0	0	0.0	0	14.3
OTHER (COTS Replacement)		5.2		9.2		2.4		0.9		6.0		6.4		7.1		2.6	0	0.0	0	50.0	0	89.8
OTHER (Combat System Display Suite)				0.5															0	0.0	0	0.5
OTHER (Congressional Add for NULKA)		5.0		0.0															0	0.0	0	5.0
TOTAL PROCUREMENT		138.1		41.1		52.8		20.5		7.0		7.4		8.1		23.7		0.0	0	225.5	0	524.2
INSTALL COST*	13	37.3	2	4.2	3	4.9	3	21.6	2	8.6	0	0.0	0	0.0	0	0.0	0	0.0	11	83.3	34	159.9
TOTAL PROGRAM COST	15	175.4	4	45.3	3	57.7	1	42.1	0	15.6	0	7.4	0	8.1	1	23.7	0	0.0	10	308.8	34	684.1

P-1 SHOPPING LIST 106

CLASSIFICATION: **UNCLASSIFIED** \* Includes FMP, Planning, and Non-FMP Installation

PAGE NO. 4

P3A (Continued)					INDIVIDU	AL M	ODIFICAT	ION (	Continued)										ı	FEBRUAR	Y 2004	1		
MODELS OF SYS	TEMS AFF	ECTE	D: SH	IP SELF	DEFENSE	SYS	<u>г</u> ЕМ (SSDS	)	MODIFICAT	ION	TITLE:										_			
NSTALLATION IN			Altorat	ion Inc	tallation T	·oam	(AIT)																	
ADMINISTRATIVE			2 mont		taliation i	eaiii		TION	LEADTIME:		12	Mor	the											
CONTRACT DATE		FY 20		10/02	2/02		FY 2004:		10/03	വാ		IVIOI	FY 2				10/04	- 02/05						
DELIVERY DATE:		FY 20		2/03 -			FY 2004:		2/04 -				FY 2					12/06						
DELIVERT DATE.		F1 20	<i>J</i> 03.	2/03 -	12/03		FT 2004.		2/04 -	12/(	<u> </u>		ГІ 2	005.			2/03 -	12/00						
											(\$ in Millio					1								
Cost:		Prior Qty	Years \$	FY Qty	<sup>'</sup> 2002 \$	P Qty	Y 2003 \$	Qty	FY 2004 \$	Qty	FY 2005 \$	Qty	Y 2006 \$	Qty	Y 2007 \$		FY Qty	<sup>'</sup> 2008 \$	Qty	Y 2009 \$	To Co Qty	omplete \$	Qty	Total \$
		Qty	Ψ	Qty	Ψ	Qty	Ψ	Qty	Ψ	Qty	Ψ	Qty	Ψ	Qty	Ψ		Qty	Ψ	Qty	Ψ	Qty	Ψ	Qty	Ψ
PRIOR YEARS		13	36.8		0.5		0.0		0.0		0.0		0.0			0.0		0.0		0.0		0.0	13	37.3
FY 2002 EQUIPM	MENT					2	3.3									0.0		0.0		0.0		0.0	2	3.3
FY 2003 EQUIPM	MENT					0	0.9	2	0.7			1	2.8	1		0.0							4	4.4
FY 2004 EQUIPM	MENT								4.2	3	19.0												3	23.2
FY 2005 EQUIPM	MENT							0		0	2.6	1	5.9										1	8.5
FY 2006 EQUIPM	MENT											0	0.0	0	(	0.0							0	0.0
FY 2007 EQUIPM	MENT													0		0.0	0	0.0					0	0.0
FY 2008 EQUIPM	MENT																0	0.0	0	0.0			0	0.0
FY 2009 EQUIPM	MENT																		0	0.0	1	7.5	1	7.5
TO COMPLETE																					10	75.8	34	159.9
INSTALLAT	ION SCHE	DULE	<u>:</u>																					
	FY 2002		FY 200	_	FY 2				2005		FY 2006		FY 2				FY 20			FY 2009	,		TC	TOTAL
IN	& Prior	2	2 3 0 0	0	1 2	<u>3</u> 0	4 1 0 0	1	2 0	0	2 <u>3</u> 2 0	0	1 0	0	I	<u>1</u> 0	0	3 4 0 0	0	0 0	0		11	34
OUT	13	0	0 0	0	0 0	2		0	0 0	2		1		1		0	0	0 0	0	0 0	0		11	34
First LHD (LHD 7)																<u> </u>	0	0 0		0 0	U			

		BUDGET	<b>ITEM JUSTI</b>	FICATION S	HEET			DATE:				
			P-40	)					ı	February 200	)4	
APPROPRIATION/B	SUDGET ACTIVITY					P-1 ITEM NOM	MENCLATURE	•		-		
OTHER PROCUE	REMENT, NAVY							AEGIS SU	JPPORT EQU	PMENT / 5246	600/524605	
Program Element for	Code B Items:					Other Related	Program Eleme	ents				
							0604307N	l				
	FY 2002 and	ID									То	
	Prior Yrs	Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	Complete	Total
QUANTITY												
COST												
(In Millions)	\$390.8	Α	\$152.2	\$96.7	\$57.5	\$107.1	\$81.7	\$104.7	\$87.5		TBD	\$1,078.2
SPARES COST												
(In Millions)	\$5.4		\$2.0	\$2.8	\$2.5	\$1.8	\$2.3	\$2.6	\$2.5		TBD	\$21.9

#### PROGRAM DESCRIPTION/JUSTIFICATION:

1. This program provides equipment for shore facilities and for shipboard upgrades to support the battle readiness of AEGIS Cruisers and Destroyers in the following areas: a. Special Tooling and Test Equipment for AEGIS unique depots; b. Computer, displays and simulators for the AEGIS Computer Center (ACC) at Dahlgren, VA; c. Weapon/Combat System equipments for the Surface Combat Systems Center (SCSC) at Wallops Island, VA; d. Weapon System Training equipment for the AEGIS Training & Readiness Center (ATRC) at Dahlgren, VA; e. AEGIS Weapon System ORDALT procurement; f. AEGIS Weapon System SHIPALT procurement; g. Class Common Equipment to support shorter Regular Overhauls and Selected Restricted Availabilities. Includes Weapon and Ship System Components that require long repair turn-around; h. Field Activity Integrated Communications Equipment; i. Engineering Control and Surveillance Equipment (ECSE); j. CG Conversion Landbased Site Equipment k. Shipboard equipment and ORDALT installation; l. Area Air Defense Commander (AADC) site equipment.

2. The FY 2003-09 funds will be used to upgrade three centers (AEGIS Computer Center, AEGIS Training & Readiness Center, and Surface Combat Systems Center) to properly accommodate CG 47 and DDG 51 Combat System Baselines and to provide shipboard SHIPALT and ORDALT equipments for existing Cruiser and Destroyer Baselines. Funding is also for the installation of equipment including the Fleet Modernization Program, training equipment, and other shore facilities. These include, among others, the following major Weapon/Combat systems:

Description

CG Baseline 1 SPY-1A RADAR

Aegis Display System Mark I Mark 26 Launching System LAMPS Mark III Helicopter

MK 116 MOD 4 Underwater Fire Control

UYK-7/20 Computers

CG Baseline 2 CG Baseline 1 Plus

Tomahawk Weapon System

Anti-Submarine Warfare Upgrade SQQ-89 MK 41 Vertical Launch System in place of MK 26

Applicable Hulls

F/F CG 47 - CG 51

F/F CG 52 - CG 58

P-1 SHOPPING LIST 107

PAGE NO. 1 CLASSIFICATIO

	BUDGET ITE	M JUSTIFICATION SHEE P-40 CONTINUATION	Т		DATE: FEBRUARY 2004
APPROPRIATION/BUD OTHER PROCUREI		ance Support Equipment		P-1 ITEM NOMENCLATURE <b>AE</b>	GIS SUPPORT EQUIPMENT / 524600/524605
Program Element for Co	de B Items:			Other Related Program Elemer	nts
CG Baseline 3A	Description: CG Baseline 2 plus SPY-1B RADAR in place of SPY-1A UYQ-21 Displays in place of UYA-4 Backfit UYK-43 (LoBoy)/44 Computers	Applicable Hulls: B/F CG 59 - CG 64	DDG Baseline 4	Description: CG Baseline 3 plus SPY-1D RADAR in place of SPY-1 MK 160 Gun Computing System ir UYK-43/44 Computers in place of	place of MK 86
CG Baseline 4	CG Baseline 3 plus Vertical Launch ASROC SM-2 Missile Upgrade UYK-43/44 Computers in place of UYK-7.	F/F CG 65 - CG 73	DDG Baseline 5	DDG Baseline 4 plus Joint Tactical Information Distribut System (JTIDS/Command & Contr Combat Direction Finding (CDF) Tactical Data Information Exchang	rol (C2P)
CG Baseline 6.1	CG Baseline 4 plus CEC, ADS MK 6 MOD 2, UYQ-70 Partial, NGP/Optical Disk, CLDS, Armed Helo, SGS, SARTIS	B/F CGS 59, 65, 66, 68, 69 & 71		AN/SLQ-32(V) 3 Active Electronic Aegis Extended Range (ER) Missi	, ,
CG Baseline 7.1.C	CG Baseline 2, 3, 4, & 6 plus DDG Baseline 7 Land Attack	B/F CG 52 - 73	DDG Baseline 6 Phase 1	DDG Baseline 5 plus ORTS Upgrade, ECM Upgrade, Al SQQ-89 (V) 10, ATWCS Phase 2 AN/UYQ-70, Doppler SONAR Velo	
	Advanced Architecture		DDG Baseline 6 Phase 3	DDG Baseline 6 Phase 1 plus Upgrades to AN/UYQ-70 Display 9 Upgrades to ORTS, CEC, NAVSS CDLMS, JTT, ESSM, STAMO Mod for F/F only SQQ-89(V)14 & ALIS	I Blk III,
			DDG Baseline 7.1/7.1R	DDG Baseline 6 Phase 3 plus SQQ-89(V)15, SPY-1D(V) Advanced Computing, Remote Mir Hawklink KuBand, MK 160 MOD 9	9.
3. No ERF, D funds include	ed in these exhibits.				

P-1 SHOPPING LIST 107

DD Form 2454, JUN 86 PAGE NO. 2 CLASSIFICATION: UNCLASSIFIED

	WEAPONS SYSTEM COS P-5	T ANAL	YSIS			AEGIS Wea		m EAPON SYST	ГЕМ				DATE:	BRUARY 2	2004
	PRIATION/BUDGET ACTIVITY Procurement, Navy / BA-4					ID Code		IOMENCLATU		)					
		_	1			Α	<b>AEGIS S</b>	UPPORT E	QUIPMENT	524600	524605 <i>  A</i>	\4L7			
			TOTAL COS	T IN THOUS	SANDS OF DO	DLLARS									
COST	ELEMENT OF COST	ID Code	FY 2002 and Prior Yrs		FY 2003			FY 2004			FY 2005				
CODE		Codo	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	SPONSOR N76														
L7001	DEPOT SPECIAL TOOLING/TEST EQPT		7,767			1,618	i		891			870			
L7003	AEGIS COMPUTER CENTER EQPT		7,576			5,415			3,151			1,175			
L7005	SMARTSHIP SYSTEMS		112,482			12,588			5,030			0			
L7006	SURFACE COMBAT SYSTEMS CENTER EQPT		6,761			4,164			1,746			2,288			
L7007	AEGIS TRAINING & READINESS CENTER		5,882			2,043			1,780			1,816			
L7010	AEGIS WEAPON SYSTEM ORDALTS		42,837			8,207			5,661			6,664			
L7011	AEGIS WEAPON SYSTEM SHIPALTS		60,471			67,114			40,049			17,190			
L7013	CLASS COMMON EQUIPMENT		4,596			1,000			2,000			2,000			
L7016	FIELD ACT'Y INTEGRATED COMM EQPT		1,429			392	:		400			0			
L7021	CG CONVERSION		67,305			0			0			0			
L7022	AADC		0			19,463	;		0			0			
L7023	IBS SYSTEMS		0			1,800	ı		4,200			0			
L7067	USS COLE RESTORATION		10,500			0	ı		0			0			
L7070	COMBAT SUPPORT SHIPALTS		0			0			13,468			10,200			
L7600	INSTALLATION OF EQPT, FMP		63,204			28,425			18,293			15,314			
			390,810			152,229			96,669			57,517			

DD FORM 2446, JUN 86 P-1 SHOPPING LIST 107 PAGE NO. 3 CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY	AND PLANNING	G EXHIBIT (P	-5A)			AEGIS Weapon System		DATE: FEBR	RUARY 2004	
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy						I NOMENCLATURE PORT EQUIPMENT 524600/52	24605		SUBHEAD A4L7	
					CONTRACT			DATE OF	SPECS	DATE
Cost Element/	QTY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS
FISCAL YEAR		COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
FISCAL YEAR 2003										
L7003										
AEGIS COMPUTER CENTER										
COMMERCIAL SYS MOD	1 LOT	927	NSWC DD	10/02	FP	VARIOUS	01/03	6/03	YES	
CABLES	1 LOT	200	NSWC DD	10/02	FP	VARIOUS	01/03	6/03	YES	
ASTATS SIM/EMULATORS	1 LOT	4288	NSWC DD	10/02	FP	SABTECH-CALIFORNIA	01/03	8/03	YES	
L7005										
SMARTSHIP SYSTEMS										
SMARTSHIP UPGRADE (CG)	1	5200	NAVSEA	N/A	CP	NORTHROP GRUMMAN	5/03	11/03	YES	
ENGINEERING	1 LOT	3757	NAVSEA	N/A	WR	N/A	N/A	N/A	N/A	
LOGISTICS	1 LOT	300	NAVSEA	N/A	WR	N/A	N/A	N/A	N/A	
TRAINING	1 LOT	831	NAVSEA	N/A	WR	N/A	N/A	N/A	N/A	
WIRELESS COMMS	1 LOT	2500	NAVSEA	N/A	CP	TBD	03/03	01/03	YES	
<u>L7006</u>										
scsc										
COTS UPGRADES	1 LOT	1709	NSWC DD	10/02	FP	VARIOUS	1/03	10/03	YES	
COMMERCIAL WATER SKID	1	500	coscsc	11/02	FP	COMPETITIVE AWARD	1/03	8/03	YES	
SUPPORT EQUIPMENT	1 LOT	1337	coscsc	11/02	FP	VARIOUS	1/03	10/03	YES	
EQUIPMENT ACTIVATION	1 LOT	618	NSWC DD	11/02	FPAW	LOCKHEED MARTIN- NJ	12/02	10/03	YES	
<u>L7007</u>										
ATRC										
COTS MODERNIZATION	1 LOT	2043	NSWC DD	10/02	FP	VARIOUS	1/03	10/03	YES	
AND SWITCHING										
D. REMARKS										<u> </u>

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST 107

PAGE NO. 4

BUDGET PROCUREMENT HISTORY AN	ND PLAN	INING EXHII	BIT (P-5A)			<b>AEGIS Weapon System</b>		DATE: FEBR	RUARY 2004	
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM N	IOMENCLATURE			SUBHEAD	
Other Procurement, Navy					<b>AEGIS SUF</b>	PORT EQUIPMENT 5246	00 / 524605		A4L7	
					CONTRACT			DATE OF	SPECS	DATE
Cost Element/	QTY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS
FISCAL YEAR		COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
FISCAL YEAR 2003 (cont)										
L7010										
AWS ORDALTS										
B600 PRINTER REPLACEMENT O/A	30	10	NAVSEA	09/02	воа	LM GES - NEW JERSEY	1/03	12/03	YES	
ACSSFC INPUT SAFETY O/A	1 LOT	1026	NSWC PHD	12/02	FP	COMPETITIVE AWARD	1/03	5/03	YES	
MK 84 FC-72 FLUID REMOVAL O/A	1 LOT	2500	NSWC PHD	12/02	FP	COMPETITIVE AWARD	1/03	5/03	YES	
MK 26 LAUNCHER SAFETY O/A	5	192	NSWC PHD	11/02	FP	COMPETITIVE AWARD	1/03	5/03	YES	
CND/SONAR TEMP CONTROL VALVE O/A	1 LOT	3421	NSWC PHD	11/02	FP	COMPETITIVE AWARD	1/03	5/03	YES	
<u>L7011</u>										
AWS SHIPALTS										
TIP CABINETS	4	800	NAVSEA	10/02	ВОА	LM GES - NEW JERSEY	12/02	12/03	YES	
TIP SWITCHES	7	50	NSWC PHD	10/02	FP	VARIOUS	12/02	12/03	YES	
SGS IN-LINE KITS	25	112	NAWCAD/PAX	10/02	FP	VARIOUS	12/02	12/03	YES	
SPY FLEX HOSE KITS	10	224	NSWC PHD	10/02	FP	VARIOUS	12/02	12/03	YES	
ORTS NET SHIPSETS	4	207	NSWC PHD	10/02	FP	VARIOUS	12/02	12/03	YES	
UYK-43 CARDS	143	10	NAVSEA	10/02	ВОА	LM TDS - MINNESOTA	12/02	12/03	YES	
Q-70's FOR DDG 80	1 LOT	9075	NAVSEA	10/02	ВОА	LM TDS - MINNESOTA	12/02	12/03	YES	
Q-70's FOR DDG 84	1 LOT	6800	NAVSEA	10/02	BOA	LM GES - NEW JERSEY	12/02	12/03	YES	
Q-70 SUPPORT EQUIPMENT	1 LOT	9031	VARIOUS	10/02	FP	VARIOUS	12/02	12/03	YES	
NGPs for DDGs	32	200	NAVSEA	11/02	BOA	LM TDS - MINNESOTA	12/02	6/03	YES	
SUPPORT EQUIPMENT DDGs	1 LOT	20160	VARIOUS	11/02	FP	VARIOUS	12/02	6/03	YES	
Q-70 GUNS EQUIPMENT for DDGs	3	1600	NSWC/LOUIS	10/02	FP	LM TDS - MINNESOTA	11/02	1/04	YES	
D. REMARKS:			1		<u>I</u>			<u> </u>	1	I

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST 107

PAGE NO. 5 CLASSIFICATION: UNCLASSIFIED

<b>BUDGET PROCUREMENT HISTORY</b>	AND PLA	NNING EXH	IIBIT (P-5A)			AEGIS Weapon System	1	DATE: FEBR	RUARY 2004	
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM N	IOMENCLATURE		•	SUBHEAD	
Other Procurement, Navy					<b>AEGIS SUP</b>	PORT EQUIPMENT 5246	00/524605		A4L7	
					CONTRACT			DATE OF	SPECS	DATE
Cost Element/	QTY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS
FISCAL YEAR		COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
FISCAL YEAR 2003 (cont)										
<u>L7013</u>										
CLASS COMMON EQUIPMENT										
	1100	F00	CLIDCLIID / DATLI	10/00	FD	DIM MAINE	10/00	10/00	VEC	
CCE FOR DDG-51 CLASS	1 LOT	500	SUPSHIP / BATH	10/02	FP	BIW - MAINE	12/02	12/03	YES	
CCE FOR CG-47 CLASS	1 LOT	500	SUPSHIP / PASC	10/02	FP	ISI LITTON - MISS	12/02	12/03	YES	
<u>L7022</u>										
AADC										
AADC CAPABILITY SYSTEMS	4	4865.75	NAVSEA	TBD	CPFF/CPAF	GD-GREENSBORO NC	12/02	06/03	TBD	ONGOING
<u>L7023</u>										
IBS										
IBS SYSTEMS	1	1800	NAVSEA	TBD	FP		03/03	01/03	YES	
FISCAL YEAR 2004										
L7003										
AEGIS COMPUTER CENTER										
COMMERCIAL SYS MOD	1 LOT	951	NSWC DD	N/A	FP	VARIOUS	11/03	02/04	YES	
CABLES	1 LOT	200	NSWC DD	N/A	FP	VARIOUS	11/03	02/04	YES	
AEGIS SIMULATORS/PERIPHERALS	1 LOT	2000	NSWC DD	N/A	FP	SABTECH Inc., CA.	01/04	09/04	TBD	
<u>L7005</u>										
SMARTSHIP SYSTEMS										
ENGINEERING	1 LOT	1180	NAVSEA	N/A	WR	N/A	N/A	N/A	N/A	
LOGISTICS	1 LOT	394	NAVSEA	N/A	WR	N/A	N/A	N/A	N/A	
TRAINING	1 LOT	56	NAVSEA	N/A	WR	N/A	N/A	N/A	N/A	
WIRELESS ACCESS TECHNOLOGY	1 LOT	3400	NAVSEA	N/A	WR	3eti	01/04	12/04	TBD	
D. REMARKS	•			1				•		•

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST 107

PAGE NO. 6 CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY ANI	D PLANNI	NG EXHIBIT	(P-5A)			Weapon System		DATE: FEBI	RUARY 2004	
B. APPROPRIATION/BUDGET ACTIVITY					_	NOMENCLATURE			SUBHEAD	
Other Procurement, Navy	,			T	AEGIS SUPF	PORT EQUIPMENT 524600/5	24605	•	A4L7	•
					CONTRACT			DATE OF	SPECS	DATE
Cost Element/	QTY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS
FISCAL YEAR		COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABL
FISCAL YEAR 2004 (cont)										
<u>L7006</u>										
scsc										
COTS UPGRADES	1 LOT	738	NSWC DD	N/A	RCP	VARIOUS	12/03	6/04	YES	
SYSTEMS ENGINEERING	1 LOT	350	NAVSEA	N/A	RCP	LM GES - NEW JERSEY	12/03	6/04	YES	
COTS MODERNIZATION & SWITCHING	1 LOT	625	NSWC DD	11/03	RCP	LM TDS - MINNESOTA	12/03	6/04	YES	
EXCOMM	1 LOT	33	NAWCAD/PAX	11/03	RCP	VARIOUS	12/03	6/04	YES	
<u>L7007</u>										
ATRC										
COTS MODERNIZATION	1 LOT	1780	NSWC DD	11/03	BOA	VARIOUS	12/03	7/04	YES	
AND SWITCHING										
<u>L7010</u>										
AWS ORDALTS										
CND/SONAR TEMP CONTROL VALVE	1 LOT	1772	NSWC PHD	11/03	RCP	COMPETITIVE AWARD	12/03	6/04	YES	
MK 84 FC-72 FLUID REMOVAL O/A	1 LOT	1100	NSWC PHD	11/03	RCP	COMPETITIVE AWARD	12/03	6/04	YES	
B600 PRINTER REPLACEMENT O/A	30	10	LOCKHEED	12/03	BOA	LM GES - NEW JERSEY	12/03	6/04	YES	
Q-70 ORDALTS	1 LOT	2489	NAVSEA	01/04	ВОА	LM TDS - MINNESOTA	12/03	6/04	YES	
<u>L7011</u>										
AWS SHIPALTS										
NGPs - REPLACE OL-267/RD-358	16	200	NAVSEA	12/03	ВОА	LM TDS - MINNESOTA	12/03	7/04	YES	
UYH-16/3 REPLACEMENT UNITS	30	300	NAVSEA	12/03	ВОА	LM TDS - MINNESOTA	01/04	11/04	YES	
UYK-43 CARDS	300	10	NAVSEA	01/04	ВОА	LM TDS - MINNESOTA	01/04	9/04	YES	
DDG BACKFIT EQUIPMENT	1	12649	NAVSEA	01/04	ВОА	VARIOUS	01/04	9/04	YES	
CIWS-1B MODS	2	5500	NAVSEA	01/04	ВОА	VARIOUS	01/04	6/04	YES	
CIWS-1B WALLOPS UPGRADE	1	1200	NAVSEA	09/03	FFP	RAYTHEON	01/04	9/04	YES	
D. REMARKS					-	-		-		

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST 107

PAGE NO. 7 CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND	D PLANNI	NG EXHIBIT	(P-5A)			Weapon System		DATE: FEBR	RUARY 2004	
						, ,				
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM	OMENCLATURE			SUBHEAD	
Other Procurement, Navy					<b>AEGIS SUPF</b>	ORT EQUIPMENT 524600/52	24605		A4L7	
					CONTRACT			DATE OF	SPECS	DATE
Cost Element/	QTY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS
FISCAL YEAR		COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
FISCAL YEAR 2004 (cont)										
<u>L7013</u>										
CLASS COMMON EQUIPMENT										
CCE FOR DDG-51 CLASS	1 LOT	1000	SUPSHIP / BATH	08/03	FP	BIW - MAINE	1/04	6/04	YES	
CCE FOR CG-47 CLASS	1 LOT	1000	SUPSHIP / PASC	08/03	FP	ISI LITTON - MISS	1/04	6/04	YES	
<u>L7023</u>										
IBS										
IBS SYSTEMS	1 LOT	4200	NAVSEA	TBD	FP	SPERRY MARINE -	01/04	12/04	TBD	
						CHARLOTTSVILLE, VA				
<u>L7070</u>										
COMBAT SUPPORT SHIPALTS										
COMBAT SUPPORT SHIPALTS	1 LOT	13468	VARIOUS	10/03	FP	VARIOUS	1/04	01/05	YES	
FISCAL YEAR 2005										
L7003										
AEGIS COMPUTER CENTER										
COMMERCIAL SYS MOD	1 LOT	975	NSWC DD	N/A	FP	VARIOUS	11/04	02/05	YES	
CABLES	1 LOT	200	NSWC DD	N/A	FP	VARIOUS	11/04	02/05	YES	
OADEEO	1 201	200	NOWO DD	14/74	''	VAIGOO	11/04	02/03	120	
<u>L7006</u>										
scsc										
COTS UPGRADES	1 LOT	872	NSWC DD	N/A	RCP	VARIOUS	11/04	3/05	YES	
EQUIPMENT ACTIVATION	1 LOT	758	NAVSEA	N/A	RCP	LM GES - NEW JERSEY	11/04	3/05	YES	
COTS MODERNIZATION & SWITCHING	1 LOT	625	NSWC DD	08/01	RCP	LM TDS - MINNESOTA	11/04	3/05	YES	
EXCOMM	1 LOT	33	NAWCAD/PAX	08/01	RCP	VARIOUS	11/04	3/05	YES	
D. REMARKS										

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST 103

PAGE NO. 8 CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AN	ID PLANNI	NG EXHIBIT	(P-5A)			Weapon System		DATE: FEBR	UARY 2004	
B. APPROPRIATION/BUDGET ACTIVITY						IOMENCLATURE			SUBHEAD	
Other Procurement, Navy			_		AEGIS SUPF	ORT EQUIPMENT 524600/5	24605	•	A4L7	•
					CONTRACT			DATE OF	SPECS	DATE
Cost Element/	QTY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS
FISCAL YEAR		COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABL
FISCAL YEAR 2005 (CONT)										
<u>L7007</u>										
ATRC										
COTS MODERNIZATION	1 LOT	1816	NSWC DD	09/01	BOA	VARIOUS	11/04	6/05	YES	
AND SWITCHING										
<u>L7010</u>										
AWS ORDALTS										
CND/SONAR TEMP CONTROL VALVE	1 LOT	1772	NSWC PHD	11/04	RCP	COMPETITIVE AWARD	11/04	6/05	YES	
MK 84 FC-72 FLUID REMOVAL O/A	1 LOT	1100	NSWC PHD	11/04	RCP	COMPETITIVE AWARD	11/04	6/05	YES	
B600 PRINTER REPLACEMENT O/A	30	10	LOCKHEED	12/04	ВОА	LM GES - NEW JERSEY	11/04	6/05	YES	
Q-70 ORDALTS	1 LOT	3492	NAVSEA	01/05	воа	LM TDS - MINNESOTA	11/04	6/05	YES	
<u>L7011</u>										
AWS SHIPALTS										
DDG SUPPORTABILITY MODS	1 LOT	9690	NAVSEA	12/04	ВОА	LM TDS - MINNESOTA	01/05	11/05	YES	
UYK-43 CARDS	200	10	NAVSEA	01/05	ВОА	LM TDS - MINNESOTA	01/05	9/05	YES	
CIWS-1B MODS	1	5500	NAVSEA	01/05	ВОА	VARIOUS	01/05	9/05	YES	
<u>L7013</u>										
CLASS COMMON EQUIPMENT										
CCE FOR DDG-51 CLASS	1 LOT	1000	SUPSHIP / BATH	08/04	FP	BIW - MAINE	1/05	6/05	YES	
CCE FOR CG-47 CLASS	1 LOT	1000	SUPSHIP / PASC	08/04	FP	ISI LITTON - MISS	1/05	6/05	YES	
D. REMARKS		1			L		1	1		

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST 107

PAGE NO. 9 CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY A	ND PLANNI	NG EXHIBIT (	P-5A)			Weapon System		DATE: FEBR	UARY 2004	
D. ADDDODDIATION/DUDOFT ACTIVITY					D D 4 ITEM I	NOMENOL ATURE			OUDUEAD	
B. APPROPRIATION/BUDGET ACTIVITY						NOMENCLATURE	0.4005		SUBHEAD	
Other Procurement, Navy			I	I		PORT EQUIPMENT 524600/5	24605	D. 1000 OF	A4L7	D 1 777
G (F)	OTT	LINE	LOCATION	DED IGGUE	CONTRACT	CONTEND A CITTOR	4W4DD	DATE OF	SPECS	DATE
Cost Element/	QTY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS
FISCAL YEAR FISCAL YEAR 2005 (cont)		COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
<u>L7070</u>										
COMBAT SUPPORT SHIPALTS										
COMBAT SUPPORT SHIPALTS	1 LOT	10200	VARIOUS	10/04	FP	VARIOUS	1/05	02/06	YES	
D. REMARKS						ı				

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST 107

PAGE NO. 10

INSTALL COST

TOTAL PROGRAM COST

P3A		IND	IVIDU	AL MO	DIFIC	ATION																
MODELS OF SYSTEM AFFECTED:	AEGIS WEAPONS	SYST	EMS	_	TY	PE MC	DIFIC	OITA	۱:	DEPO	OT SP	ECIAL	TOC	LING		MOD	IFICA	TION	TITLI	E:	L700	1
DESCRIPTION/JUSTIFICATION:																						
Depot Special Tooling and Test Equipr This special support equipment is requ disrepair and will not be able to suppor	ired to maintain, tro																				will fall	l into
DEVELOPMENT STATUS/MAJOR DEV	/ELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:  PRIOR YR FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 TC TOTAL  QTY \$																					
PRIOR YR FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 TC TOTA  QTY \$ QTY														OTAL								
	QT	Y \$	QT`	/ \$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)	-																					
RDT&E																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRIN	IG																					
EQUIPMENT	VA	R 7.7	' VAF	1.6	VAR	0.9	VAR	0.9	VAR	0.8	VAR	0.8	VAR	0.8	VAR	0.8	VAR		VAR	TBD	VAR	14.3
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						

0.9 P-1 SHOPPING LIST

1.6

0.9

CLASSIFICATION: UNCLASSIFIED

TBD

14.3

8.0

8.0

8.0

8.0

P3A INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: <u>AWS</u> TYPE MODIFICATION: <u>AEGIS COMPUTER CENT</u>ER MODIFICATION TITLE: <u>L7003</u>

DESCRIPTION/JUSTIFICATION:

The AEGIS Computer Center (ACC) requires OPN equipment upgrades in order to maintain testing capabilities for backfit computer program baselines.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	PRIO	R YR	FY 2	2003	FY 2	2004	FY 2	<u>2005</u>	<u>FY 2</u>	2006	FY:	2007	FY 2	2008	FY 2	2009	<u>FY 2</u>	2010	]	<u>-c</u>	I	OTAL
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT	VAR	7.5	VAR	5.4	VAR	3.1	VAR	1.2	VAR	2.4	VAR	2.5	VAR	2.5	VAR	2.5			VAR	TBD	VAR	27.1
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST																						
TOTAL PROGRAM COST		7.5		5.4		3.1		1.2		2.4		2.5		2.5		2.5				TBD		27.1

P-1 SHOPPING LIST 107

P3A	INDIVIDUAL MODIFICATION

MODELS OF SYSTEM AFFECTED: <u>AWS</u> TYPE MODIFICATION: <u>SMARTSHIP</u> MODIFICATION TITLE: <u>L7005</u>

DESCRIPTION/JUSTIFICATION:

Funds will be used to backfit labor saving Smartship enabling technologies on CG class ships. Includes 3.4M added in the Support Equipment row and FY04 column for All-In-One Wireless Access points

#### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	PRIO QTY	<u>R YR</u> \$	<u>F\</u> QTY	<u>/ 2003</u> \$	F) QTY	<u>/ 2004</u> \$	<u>FY</u> QTY	<u>2005</u> \$	<u>FY</u> QTY	2006 \$	FY 2 QTY		<u>FY</u> QTY	<u>2008</u> \$	FY 2		FY 2 QTY		QTY	TC \$	QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)		Ψ	QTT	Ψ	Q   1	Ψ	QTT	Ψ	Q I I	Ψ	Q I I	Ψ	QTT	Ψ	QII	Ψ	QII	Ψ	QTT	Ψ	QTT	Ψ
RDT&E																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT	7	49.6	1	5.2					3	19.2	1	6.4	2	12.8					58	TBD	72	93.2
EQUIPMENT NONRECURRING		10.0																				10.0
TEST EQUIPMENT		2.3																				2.3
TRAINING EQUIPMENT		6.6																				6.6
SHOCK TRAILS & RETROFIT		3.2																				3.2
SUPPORT EQUIPMENT		1.1				3.4																4.5
ENGINEERING		22.9		6.2		1.1				6.9		1.0		5.7		1.7				TBD		45.5
LOGISTICS		3.8		0.3		0.4				2.2		0.4		2.4		0.3				TBD		9.8
TRAINING		2.1		0.9		0.1				0.6		0.1		0.7		0.1				TBD		4.6
ENGINEERING CHANGE PROPOSALS		3.6																				3.6
INSTALL COST	5	12.7	2	5.7	1	5.4			2	11.6	1	5.8	1	5.8	2	11.6				TBD		
TOTAL PROGRAM COST		117.9		18.3		10.40		0.0		40.5		13.7		27.4		13.7			58	TBD	72	241.9

P-1 SHOPPING LIST 107 PAGE NO. 13

PRIOR YEARS 4 7.3 4 7.3 4 7.3 4 7.3 4 7.3 5 7 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	P3A (Continued)					AWS MODIFICATION (Continued)  MODIFICATION TITLE: SMARTSHIP																													
METHOD OF IMPLEMENTATION:  ADMINISTRATIVE LEADTHISS  PY 2000:  NA  FY 2001:  NA  FY 2001:  NA  FY 2002:  NA  NA  FY 2002:  NA  FY 2003:  NA  FY 2003:  NA  FY 2003:  NA  FY 2004:  NA  F	MODELS OF SYSTE	MS AI	FFECTE	<u>:</u>		AWS				MODIFICA	ATION	TITLE <u>:</u>	:	SN	MARTS	HIP		-					L70	005											
ADMINISTRATIVE LEADTIME 12 Morths																																			
CONTRACT DATE:   FY 2000:   NA							_																												
DELIVERY DATE: PY 2000: NA PY 201: NA FY 2001: NA FY 2002: March 2002  (S) Mar					<u> </u>					TION LEAD			12 mont	hs		_																			
Cost:   Prior Years   FY 2003   FY 2004   FY 2005   FY 2006   FY 2007   FY 2008   FY 2009   FY 2010   To Complete   Total Years   FY 2010   To Complete   Total Years   FY 2011   To Complete   FY 2011	CONTRACT DATES:		FY 2	000:		N/A	_	- 1	FY 2001:		N/A					FY 20	002:		Nove	mber 20	001														
COST: PITO YEARS ONY \$ 0NY \$ 0	DELIVERY DATE:		FY 2	000:		N/A	_	- 1	FY 2001:		N/A					FY 20	002:		March	2002															
COST: PITO YEARS ONY \$ 0NY \$ 0												(\$ ir	n Million	s)																					
PRIOR YEARS 4 7.3	Cost:		Prior	Years	3	FY	2003		FY	2004				7	FY	2006			FY 2	2007		F۱	Y 2008			FY 2	009		FY	2010		To Co	mplete	Т	otal
PRIOR YEARS  4 7.3			Qty	\$	;	Qty	\$		Qty	\$					Qty	\$	3	C	Qty	\$		Qty		\$	Q	ty	\$		Qty	\$		Qty	\$	Qty	\$
FY 2001 EQUIPMENT				7	2																														7.0
FY 2002 EQUIPMENT	PRIOR YEARS		4	7.	3						-			╢														-						4	1.3
FY 2003 EQUIPMENT	FY 2001 EQUIPMEN	١T																																0	0
FY 2004 EQUIPMENT	FY 2002 EQUIPMEN	ΝT	1	5.	4	2	5.7																											3	11.1
FY 2005 EQUIPMENT	FY 2003 EQUIPMEN	ΝT							1	5.4																								1	5.4
FY 2006 EQUIPMENT	FY 2004 EQUIPMEN	ΝT																																0	0
FY 2007 EQUIPMENT	FY 2005 EQUIPMEN	ΝT																																0	0
FY 2008 EQUIPMENT	FY 2006 EQUIPMEN	ΝT													2	11	.6																	2	11.6
FY 2009 EQUIPMENT	FY 2007 EQUIPMEN	٧T																	1	5.8														1	5.8
TO COMPLETE  INSTALLATION SCHEDULE:    Prior Year     FY 2002     FY 2003     FY 2004     FY 2005     FY 2006     FY 2007     FY 2008     FY 2009     Total Qty Total	FY 2008 EQUIPMEN	٧T																				1	Ę	5.8										1	5.8
INSTALLATION SCHEDULE:    Prior Year     FY 2002   FY 2003     FY 2004     FY 2005     FY 2006     FY 2006     FY 2007     FY 2008     FY 2009     Total Qty   Tot	FY 2009 EQUIPMEN	٧T																							2	2	11.6							2	11.6
Prior Year   FY 2002   FY 2003   FY 2004   FY 2005   FY 2006   FY 2007   FY 2008   FY 2009    1 2 3 4 1 1 2 3 4	TO COMPLETE																															58	TBD	72	58.6
1 2 3 4 1 2 3	INSTALLATION SCH	EDUL	.E:																																
1 2 3 4 1 2 3			Prio	r Year		FY	FY 20	004		FY	2005			FY 2	2006		F۱	Y 2007			FY 2	ากล		FY	2009				Total Otv	Total Cost					
IN var					4			4			1			4   1			4	1			4				1			. 1			4			rotal Gty	Total Cost
· · · · · · · · · · · · · · · · · · ·		IN v	ar var	var	var	var var	var	var	var var	var va	var							var				var va	ar var	var	var	var	var va	ar va							
· · · · · · · · · · · · · · · · · · ·	0	UT v	ar var	var	var	var var	· var v	var	var var	var va	var	var	var va	ar va	ar var	r var	var	var	var	var	var	var va	ar var	var	var	var	var va	ır va	r var	var	var				
* Funding for FY99 and prior installations budgeted in equipment procurement line. Funding transferred to installation line for FY01 and outyears.		-																							*			-11							
	* Funding for FY99 a	and pr	ior insta	llations	budgeted in equipment procurement line. Funding transferred to installation line for FY01 and ou												outy	ears.																	
P-3A																									P-3A										
P-1 SHOPPING LIST 107 PAGE NO. 14 CLASSIFICATION: UNCLASSIFIED	L					P.1 SHODDING LIST 107 PAGE NO 14																			CLAS	SIFICAT	TION	· UN	ICL.	AS	SIFIE	D			

P3/	Α	

MODELS OF SYSTEM AFFECTED: TYPE MODIFICATION: SURFACE COMBAT SYSTEMS CENTER MODIFICATION TITLIL7006

DESCRIPTION/JUSTIFICATION:

The Surface Combat Systems Center (SCSC) at Wallops Island, VA requires OPN equipment upgrades in order to maintain testing and training capabilities for the Fleet.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	<u>P</u> QTY	RIOR \$	<u>FY</u> QTY	2003 \$	FY 2 QTY	2004 \$			<u>FY</u> QTY		<u>FY</u> QTY		FY 2		FY 2 QTY		FY 2 QTY	<u>2010</u> \$	QTY	<u>TC</u> \$	<u>TO</u> QTY	TAL \$
FINANCIAL PLAN (IN MILLIONS)		Ψ				Ψ				<u> </u>						Ψ		Ţ		•		<b>*</b>
RDT&E																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT	VAR	6.8	VAR	4.2	VAR	1.7	VAR	2.3	VAR	2.9	VAR	2.9	VAR	2.9	VAR	2.9			VAR	TBD	VAR	26.6
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT							_	_	_													
INSTALL COST							_	_	_													
TOTAL PROGRAM COST		6.8		4.2		1.7		2.3		2.9		2.9		2.9		2.9				TBD		26.6

P-1 SHOPPING LIST 107 PAGE NO. 15 CLASSIFICATION: UNCLASSIFIED

P3A

MODELS OF SYSTEM AFFECTED: TYPE MODIFICATION AEGIS TRAINING & READINESS CENTER MODIFICATION TITLE: L7007

DESCRIPTION/JUSTIFICATION:

This program provides for the upgrade of the equipment at the AEGIS Training and Readiness center so that the site can maintain training capabilities for the Fleet.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	<u>PR</u> QTY	IOR \$	FY 2	2003 \$	FY 2 QTY		<u>FY</u> QTY	200 <u>5</u>	<u>FY</u> QTY	2006 \$	<u>FY</u> QTY	2007 \$	<u>FY</u> :	2008 \$	FY 2 QTY		FY 2 QTY	OTY	TC ¢	<u>TO</u> QTY	TAL \$
FINANCIAL PLAN (IN MILLIONS)	QIII	Ψ	QIII	Ψ	QII	Ψ	QII	Ψ	QTI	Ψ	QTT	Ψ	QII	Ψ	QIII	Ψ	QIII	QTT	Ψ	QTI	ų .
RDT&E																					
<u>PROCUREMENT</u>																					
INSTALLATION KITS																					
INSTALLATION KITS - UNIT COST																					
INSTALLATION KITS NONRECURRING																					
EQUIPMENT	VAR	5.9	VAR	2.0	VAR	1.8	VAR	1.8	VAR	1.5	VAR	1.5	VAR	2.5	VAR	2.5		VAR	TBD	VAR	19.5
EQUIPMENT NONRECURRING																					
ENGINEERING CHANGE ORDERS																					
DATA																					
TRAINING EQUIPMENT																					
SUPPORT EQUIPMENT																					
OTHER																					
OTHER																					
OTHER																					
INTERIM CONTRACTOR SUPPORT																					
INSTALL COST																					
TOTAL PROGRAM COST		5.9		2.0		1.8		1.8		1.5		1.5		2.5		2.5			TBD		19.5

16

P3A

MODELS OF SYSTEM AFFECTED: TYPE MODIFICATION: AWS ORDALTS MODIFICATION TITLE: L7010

DESCRIPTION/JUSTIFICATION:

This program provides for procurement and installation of safety, required fielding, and operability modifications to core AEGIS Weapon System (AWS) elements.

These requirements continue through the life of the ships.

#### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

		RIOR	FY 2		FY 2	2004	FY 2	2005	FY	2006	FY	2007	FY	2008	FY 2	2009	FY 2	2010		TC .	TO	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT	VAR	42.8	VAR	8.2	VAR	5.7	VAR	6.7	VAR	7.8	VAR	8.1	VAR	10.0	VAR	10.0			VAR	TBD	VAR	99.3
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST		20.4		3.5		3.8		3.1		2.1		2.2		2.6		3.1				TBD		40.8
TOTAL PROGRAM COST		63.2		11.7		9.5		9.8		9.9		10.3		12.6		13.1				TBD		140.1

107

PAGE NO.

P3A (Continued)						INDI	/IDU/	AL M	ODIF	CATI	ON (C	ontin	ued)																													
MODELS OF SYSTE	MS A	AFFE	CTED	:		AWS					ľ	MODIF	FICA	LION .	TITL <u>E</u>	:		ORDI	NANC	E AL	TERA	TION	NS		_			<u>L70</u>	10													
INSTALLATION INFO	ORM <i>i</i>	ATIOI	N:																																							
METHOD OF IMPLE	MEN <sup>*</sup>	TATIO	ON:		AIT (I	PHD)																																				
ADMINISTRATIVE LI	EADI	ГІМЕ	12 Mc	nths				_		PROI	DUCT	ION L	EAD	гіме:	1	I2 mo	nths			_																						
CONTRACT DATES:	:	F	Y 200	1:	Dec	embe	r 00	_		FY 20	002:	_	Nove	ember	01				-	FY 20	03:	1	Dece	mber	02	_																
DELIVERY DATE:		F	Y 200	1: _	Α	pril 01		-		FY 20	002:	_	Α	pril 02					I	FY 20	03:		April (	03		-																
Cost:		-	Prior Y	ears			FY 2	2003			FY 2	004			(\$ ii	n Milli 005	ions)		FY 2	2006			FY :	2007			FY	2008		1	FY 2	009		F	Y 20	110		To Co	mplete	1	Tota	al
0031.		Qt		\$		Q		\$	;	Q		\$		Qt		\$		Q		\$		Q		\$	;	╟	Qty	_	\$	Q	ty	\$		Qty		\$		Qty	\$	Qty		\$
PRIOR YEARS				16.	.2																																			VAF	₹	16.2
FY 2001 EQUIPME	NT	VA	R	4.2	2				3.5																												VAF	₹	4.2			
FY 2002 EQUIPME	NT					VA	ιR	3.	.5 VAR 3.8																						_			VAF	₹	3.5						
FY 2003 EQUIPMEN	NT								VAR 3.8																							_			VAF	≀	3.8					
FY 2004 EQUIPMEN	NT								VAR 3.8 VAR 3.1																						_			VAF	₹	3.1						
FY 2005 EQUIPMEN	NT																	VA	ιR	2.	1																_			VAF	₹	2.1
FY 2006 EQUIPMEN	NT																					VA	٩R	2.	.2												_			VAF	₹	2.2
FY 2007 EQUIPMEN	NT																										VAR	2	2.6								_			VAF	₹	2.6
FY 2008 EQUIPMEN	NT																													V	AR	3.1					_			VAF	₹	3.1
FY 2009 EQUIPMEN	NT																																				_			VAF	₹	0
TO COMPLETE																																						VAR	TBD	VAF	₹	TBD
INSTALLATION SCH	łEDU	LE:																																								
			Prior \	'ear			FY 2	2002			FY 2	003			FY 2	004			FY 2	2005			FY 2	2006			FY	2007			FY 2	800		<u> </u>	Y 20	009				Total 0	Qty T	otal Cost
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3 4	4					
	IN	var	var	var	var	var	var	var	var	var	var	var	var	var	var	var	var	var	var	var	var	var	var	var	var	va	r var	r var	var	var	var	var	var	var v	ar	var v	ar					
c	TUC	var	var	var	var	var	var	r var var var var var var var var var va													va	r var	r var	var	var	var	var	var	var v	ar	var v	ar										
																												10		P-3A												
								P-1	SHO	PPING	LIST	107				PAGI	E NO	).		18			CLA	SSIFI	ICATI	ION	: UI	NCI	LAS	551	HE	ט										

P3A

MODELS OF SYSTEM AFFECTED: TYPE MODIFICATION: AWS SHIPALTS MODIFICATION TITLE: L7011

DESCRIPTION/JUSTIFICATION:

This program provides for procurement of material required to support installation of safety, fielding, and operability modifications. These requirements continue through the life of the ships. These SHIPALTS vary in scope and will be installed primarily by Alteration Installation Teams and in Public or Private Shipyards.

#### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	<u>PF</u> QTY	RIOR \$	<u>FY</u> QTY	2003 \$	<u>FY</u> QTY	2004 \$		<u>2005</u> \$		<u>2006</u> \$	<u>FY</u> QTY	<u>2007</u> \$	<u>FY</u> QTY	2008 \$	<u>FY:</u> QTY	200 <u>9</u> \$	<u>FY :</u> QTY	<u>2010</u> \$	QTY	TC \$	<u>T(</u> QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)		,		*				,						•						·		·
RDT&E																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT	VAR	60.5	VAR	67.1	VAR	40.0	VAR	17.2	VAR	27.8	VAR	30.2	VAR	34.1	VAR	39.2			VAR	TBD	VAR	316.1
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST		29.9		6.3		9.1		10.2		7.2		5.2		5.6		4.9				TBD		78.4
TOTAL PROGRAM COST		90.4		73.4		49.1		27.4		35.0		35.4		39.7		44.1				TBD		394.5

P-1 SHOPPING LIST 107 PAGE NO. 19 CLASSIFICATION: UNCLASSIFIED

P3A (Continued)																																			
MODELS OF SYSTEMS	AFFEC	CTED <u>:</u>		AWS				MODIFICATION TITLE: AWS S								IP ALT	TERATIONS L7011																		
INSTALLATION INFORM	MATION	l:																																	
METHOD OF IMPLEME	NTATIO	N:	Publi	c & Pr	ivate S	Shipyar	d Ava	ilabilitie	es; AIT																										
ADMINISTRATIVE LEAD							PRODUCTION LEADTIME: 12 months																												
CONTRACT DATES:	F	Y 2000	:	July 00	)		FY	Y 2001	:	Nov	/embe	r 00				FY 20	002:	_[	Decem	ber 01															
DELIVERY DATE:	F	Y 2000	: <u>J</u>	une 01			FY	<b>/</b> 2001	:	N	1arch (	)2				FY 20	002:	_	January	/ 03															
												(⊈ i	n Million	ne)																					
Cost:	Р	rior Yea	ars		FY 20	003		FY 2004 FY 2005									FY 2007				FY 2008			FY 2009				FY 2010			To Co	mplete	To	otal	
	Qty	,	\$	Q1	ty	\$		Qty		\$	Qt	ty	\$		Qty	,	5	Qt	ty	\$		Qty		\$	Q	ty	\$	(	Qty	\$		Qty	\$	Qty	\$
PRIOR YEARS	VAF	2	26.2																															VAR	26.2
FY 2001 EQUIPMENT	VAF	2	3.7																															VAR	3.7
FY 2002 EQUIPMENT	77.0		0	VA	ıR	6.3																												VAR	6.3
FY 2003 EQUIPMENT								VAR	9	).1																								VAR	9.1
FY 2004 EQUIPMENT											VA	ιR	10.2																					VAR	10.2
FY 2005 EQUIPMENT															VAR	7.	.2																	VAR	7.2
FY 2006 EQUIPMENT																		VA	ιR	5.2														VAR	5.2
FY 2007 EQUIPMENT																						VAR		5.6										VAR	5.6
FY 2008 EQUIPMENT																									VA	٨R	4.8							VAR	4.8
FY 2009 EQUIPMENT																																		VAR	0
TO COMPLETE																																VAR	TBD	VAR	TBD
INSTALLATION SCHED	ULE:																																		
	F	rior Ye	ar		FY 2	002		F۱	/ 2003			FY 2	004		FY	2005			FY 20	006		F	Y 2007	,		FY 20	008		FY	2009				Total Qty	Total Cost
	_		3 4	1	2	3	4 1	1 2	3	4	1	2	3	4		3	4	1	2	3	4	1 2	2 3	4	1	2	3 4	1	2	3	4				
IN	var	var va	ar var	var	var	var v	ar va	ar va	r var	var	var	var	var v	ar va	ar va	r var	var	var	var	var v	var v	ar v	ar va	r var	var	var	var va	ar var	var	var	var				
ОИТ	var	var va	ar var	var	var	var v	ar va	ar va	r var	var	var	var	var v	ar va	ar va	r var	var	var	var	var v	var v	ar v	ar va	r var	var	var	var va	ar var	var	var	var				
																									P-3A										
L													D_1 SH		NG LI	OT 40	17		DAC	SE NO	`	2	n		1 -U/A			CL 4	4 S S I E	ICATIO	M.	IINCI	ASSI	FIFD	

P3A

MODELS OF SYSTEM AFFECTED: TYPE MODIFICATION: <u>CLASS COMMON EQUIPMENT</u> MODIFICATION TITLE <u>L7013</u>

DESCRIPTION/JUSTIFICATION:

CLASS Common Equipment is battle spare HM&E equipment that is procured and stored at the shipyards in Pascagoula, MS and Bath, ME. This equipment is typically long lead items that the CG-47 and DDG-51 Ship Classes will each need on short notice in order to remain mission capable.

#### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	PF	RIOR	<u>FY</u>	<u>/ 2003</u>		2004		2005		2006	FY 2	2007	2007 FY 2008 \$ QTY \$				FY 2		<u>TC</u>	<u>TO</u>	TAL
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$ QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																					
<u>RDT&amp;E</u>																					
<u>PROCUREMENT</u>																					
INSTALLATION KITS																					
INSTALLATION KITS - UNIT COST																					
INSTALLATION KITS NONRECURRING																					
EQUIPMENT	VAR	4.6	VAR	1.0	VAR	2.0	VAR	2.0	VAR	1.2	VAR	1.2	VAR	1.1	VAR	1.1		VAR	TBD	VAR	14.2
EQUIPMENT NONRECURRING																					
ENGINEERING CHANGE ORDERS																					
DATA																					
TRAINING EQUIPMENT																					
SUPPORT EQUIPMENT																					
OTHER																					
OTHER																					
OTHER																					
INTERIM CONTRACTOR SUPPORT																					
INSTALL COST																					
TOTAL PROGRAM COST		4.6		1.0		2.0		2.0		1.2		1.2		1.1		1.1			TBD		14.2

21

РЗА

MODELS OF SYSTEM AFFECTED: TYPE MODIFICATION FIELD ACT'Y. INTEG. COMMON EQUIP MODIFICATION TITLE:

DESCRIPTION/JUSTIFICATION:

Field Activity Integrated equipment is required in order for the program office to maintain communications with field activities and Naval Shipyards.

This communications equipment is necessary to keep CG-47 and DDG-51 events coordinated, and keeping travel expenses down.

#### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	PRIOR QTY \$		FY 2 QTY	2003 \$	FY 2 QTY		FY 2	2005 ¢	<u>FY</u> QTY	2006 \$	FY 2 QTY	2007 \$	FY:	2008 ¢	FY 2 QTY	2 <u>009</u>	FY 2 QTY	2010 ¢	QTY	<u>TC</u>	<u>TO</u> QTY	TAL \$
FINANCIAL PLAN (IN MILLIONS)	QII	Ψ	Q I I	<u>Ψ</u>	QIII	Ψ	QTT	Ψ	QIII	Ψ	QII	Ψ	QIII	Ψ	QII	Ψ	QIII	Ψ	QIII	Ψ	QII	Ψ
<u>RDT&amp;E</u>																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT	VAR	1.4	VAR	0.4	VAR	0.4	VAR	0.0	VAR	0.0	VAR	0.0	VAR	0.0	VAR	0.0			VAR	TBD	VAR	2.2
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST								_														
TOTAL PROGRAM COST		1.4		0.4		0.4		0.0		0.0		0.0		0.0		0.0				TBD	VAR	2.2

L7016

P3A																								
MODELS OF SYSTEM AFFECTED:	TYPE	MODIF	FICAT	ION:	AADO						MODIFICATION TITLE <u>L7022</u>													
ESCRIPTION/JUSTIFICATION: Funds will be used to procure and install AADC Capability Systems.																								
VELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:  PRIOR FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 TC TOTA  QTY \$ QTY																								
	<u>Pi</u> QTY		<u>FY</u> QTY	2003 * \$	<u>FY</u> QTY	<u>2004</u> \$	<u>FY</u> QTY	<u>2005</u> \$	FY:	<u>2006</u> \$	FY 2	<u>2007</u> \$	<u>FY</u> QTY	<u>2008</u> \$	FY 2 QTY	200 <u>9</u> \$	FY :	2010 \$	QTY	<u>TC</u> \$	<u>T(</u> QTY	OTAL \$		
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
<u>PROCUREMENT</u>																								
INSTALLATION KITS																								
INSTALLATION KITS - UNIT COST																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT	0		4	19.5															VAR	TBD	4	19.5		
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER (LAND-BASED SITE)																						18.1		
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALL COST	0		4	12.9																TBD	4	12.9		
TOTAL PROGRAM COST	0	0.0		32.4		0.0														TBD	4	32.4		

P3A (Continued)			INDIV	IDUAL MC	DIFICA	TION (	Continue	d)																	
MODELS OF SYST	ΓEMS AF	FE <u>CTED:</u>	AWS				MODIFIC	ATION TI	TL <u>E:</u>	AAD	C					-	L7022								
INSTALLATION IN	FORMAT	ION:																							
METHOD OF IMPL	EMENTA	TI(Public	& Private \$	Shipyard A	vailabilit	ies; AIT	<u> </u>																		
ADMINISTRATIVE	LEAD <u>TIN</u>	ΛE:			PR	ODUCT	TION LEA	DTIME: 6	to 9 month	าร															
CONTRACT DATE	S: FY	2000:	N/A		FY	2001:		N/A			FY	2002:		N/A											
DELIVERY DATE:	FY	2000:	N/A		FY	2001:		N/A			FY	2002:		N/A											
									(\$ in Mi	illions)															
Cost:		or Years		FY 2003			2004		Y 2005		FY 200			Y 2007		FY 2			2009		FY 2010		mplete		otal
	Qty	\$	Qty	\$		Qty	\$	Qty	\$	C	ty	\$	Qty	\$	C	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS																						-		0	0.0
FY 2001 EQUIPM	E																							0	0.0
FY 2002 EQUIPM	E																							0	0.0
FY 2003 EQUIPM	E		4	12.	9																			4	23.4
FY 2004 EQUIPM	E																							0	0.0
FY 2005 EQUIPM	E																							0	0.0
FY 2006 EQUIPM	E																							0	0.0
FY 2007 EQUIPM	E																							0	0.0
FY 2008 EQUIPM	E																							0	0.0
FY 2009 EQUIPM	E																							0	0.0
TO COMPLETE																							TBD		TBD
INSTALLATION SO	CHEDULE	l:																							
	Pri	or Year		FY 2002		FY 2	2003	<u>F</u>	Y 2004		FY 200	<u>5</u>	F	Y 2006		FY 2	2007	FY	2008		FY 2009			Total Qty	Total Cost
	1 2	3	4 1	2 3	4 1	2	3 4	1 :	2 3	4 1	2 3	3 4	1 2	3	4 1	2	3 4	1 2	3	4 1	2 3 4				
IN	var va	ır var v	ar var	var var	var va	r var	var va	ır var v	ar var	var var	var va	ar var	var va	ır var	var var	var	var var	var var	· var \	ar var	var var var				
ОИТ	var va	ır var v	ar var	var var	var va	r var	var va	ır var v	ar var	var var	var va	ar var	var va	ır var	var var	var	var var	var var	var v	ar var	var var var				
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																		. 0, .	11111	21 40	CIEIED				

ENGINEERING CHANGE PROPOSALS

INSTALL COST

TOTAL PROGRAM COST

CLASSIFICATION: UNCLASSIFI	ED																					
P3A																						
MODELS OF SYSTEM AFFECTED:	TYPE	E MODIF	ICATI	ON:	IBS			_			MOD	IFICAT	ION T	ΓITLE:		L7023	-					
DESCRIPTION/JUSTIFICATION: Funds will be used to backfit IBS of	n AEG	ilS class	ships.																			
DEVELOPMENT STATUS/MAJOR DEVELO																						
		RIOR \$	<u>FY</u> QTY	<u>2003</u> \$	FY QTY	<u>2004</u> \$	FY QTY	<u>2005</u> \$	FY QTY	<u>2006</u> \$	FY QTY	<u>2007</u> \$	FY QTY	<u>2008</u> \$	FY 2 QTY	<u>2009</u> \$	FY 2 QTY	<u>2010</u> \$	QTY	<u>TC</u> \$	<u>TO</u> QTY	<u>TAL</u> \$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT/INSTALLATION	0		1	1.8	6	4.2														TBD	7	6.0
EQUIPMENT NONRECURRING																						0.0
TEST EQUIPMENT																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
ENGINEERING																				TBD		0.0
LOGISTICS																				TBD		0.0
TRAINING																				TBD		0.0

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0.0 CLASSIFICATION: UNCLASSIFIED P-1 SHOPPING LIST 107 PAGE NO. 25

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TBD

TBD

P3A

MODELS OF SYSTEM AFFECTED: TYPE MODIFICATION COMBAT SUPPORT SHIPALT MODIFICATION TITLE: L7070

DESCRIPTION/JUSTIFICATION:

Funds will be used to procure and install non-combat systems related ShipAlts

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	PF	RIOR	FY:	2003	FY:	2004	FY	2005	FY	2006	FY	2007	FY	2008	FY 2 QTY	2009	FY 2	2010		<u>TC</u>	<u>TO</u>	<u>TAL</u>
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$												
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT					VAR	13.5	VAR	10.2	VAR	10.8	VAR	11.3	VAR	13.0	VAR	4.8					VAR	63.6
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
LOGISTICS																						
TRAINING																						
SITES EQUIPMENT																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST								2.0		2.0		2.0		2.0		2.0						10.0
TOTAL PROGRAM COST		0.0		0.0		13.5		12.2		12.8		13.3		15.0		6.8					VAR	73.6

26

BUDG	ET ITEM	JUST	IFICATION	ISHEET			DATE:				
		P-4	0					F	ebruary 20	04	
APPROPRIATION/BUDGET ACTIVIT	Υ					P-1 ITEM NO	MENCLATU	RE			
OTHER PROCUREMENT, NA	VY					Surface To	omahawk 🤄	Support Ed	quipment (	J45A)	
BA4/Ordnance Support Equip	oment					BLI: 52500	00				
Program Element for Code B Items:						Other Relate	d Program El	ements			
Not Applicable						0204229N					
	Prior	ID								То	
	Years	Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Total
QUANTITY											
COST (\$M)	1,515.4		52.3	63.0	69.7	68.0	43.9	34.4	34.7	450.4	2,331.9

Advanced Tomahawk Weapons Control System (ATWCS) (06000) procures Tomahawk Weapon Systems (TWS) hardware and software upgrades resulting from RDT&E, N initiated improvements, operational requirements, Desert Storm lessons learned, fleet systems reviews, and Land Base Test Site (LBTS) testing. This element funds the procurement of ATWCS which provides state-of-the-art open system architecture, greater graphical display, improved interface, increased mission storage capacity, and improved flexibility and responsiveness.

<u>Tactical Tomahawk Weapons Control System (TTWCS) (06001)</u> procures, installs hardware and provides software support and integration of TTWCS, the first in a series of phased replacements of the COTS/GOTS based Weapons Control System (WCS) for the TWS. The primary objective of the TTWCS is the upgrade of the ATWCS hardware as part of the Tactical Tomahawk Program (TTP), including the enhanced performance and efficient execution of new capabilities while maintaining compatibility with existing weapon systems. The TTWCS contract is a turn key procurement that includes cost of installation of both TTWCS and Tomahawk Communications System (TCOMMS) hardware. The HP 744i Processor Life-of-Type buy requirement for FY 03 is included in this line.

Weapon Control System Product Support (06002) provides for the COTS/GOTS refreshment, engineering changes, software support, testing, and infrastructure to maintain compatibility and interoperability with existing and future systems.

Installation of Equipment (07001) accounts for installs of ATWCS though FY03, and installs of TCOMMS from FY04 through FY09.

Tomahawk Command and Control System (TC2S) Product Improvements (08000) procures required software improvements. Tomahawk mission planning is highly dependent on mapping, charting and geodesy products from National Imagery and Mapping Agency (NIMA) and imagery from national systems. Transmitting the missions to Tomahawk capable platforms depends entirely on the Navy communications system which is continually improved and updated on a regular basis, many times annually. This funding allows TC2S to retain compatibility with, and exploit the capabilities of these systems. Afloat Planning System (APS), a shipboard based version of TC2S, is included in this line. FY 2004-2005 increases are for the incorporation of Digital Scene Matching Area Correlation (DSMAC) into the PC configured Precision Targeting Workstation (PTW).

Tomahawk Communications (TCOMMS) (08001). TCOMMS hardware/software provides network connectivity for submarine and surface combatant TTWCS users and embarked Staff (functioning as Launch Area Coordinators) to communicate with in-flight missiles. Previously budgeted in the Tomahawk Command and Control System (TC2S) Product Improvements (08000) line, TCOMMS has been broken out separately in FY 2004 to distinguish submarine/surface combatant requirements from carrier requirements (remaining TC2S line is applicable to Carriers alone).

Tomahawk Blk IV Integrated Training Architecture (08002) - Provides Tactical Tomahawk Fleet Battle Group Staff training .

CLASSIFICATION:

**UNCLASSIFIED** 

DD Form 2454, JUN 86 ITEM NO. 108 PAGE NO. 1

	WEAPONS SYSTEM C P-5	OST AN	ALYSIS			Weapon Sy	stem						DATE: February	2004	
Other F	PRIATION/BUDGET ACTIVITY Procurement, Navy Indiance Support Equipment					ID Code		omahawk	JRE/SUBHEAR		(J45A)		<u> </u>		
			TOTAL COST	IN THOUSA	NDS OF DO	DLLARS									
COST	ELEMENT OF COST	ID Code	Prior Years		FY2003			FY 2004			FY 2005				
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost			
06000	Advanced Tomahawk Weapons Control System (ATWCS)		621,846			2,206									
06001	Tactical Tomahawk Weapons Control System (TTWCS) \1		11,430	5	2,608	13,040	5	1,500	7,500	18	1,177	21,200			
06002	WCS Product Support		16,013			7,080	ı		8,085			10,105			
07000	Installation of Equipment (Non-FMP)		25,762												
07001	Installation of Equipment (FMP) \2		60,631			3,007			2,013			1,133			
08000	Tomahawk Command and Control (TC2S) Product Improvements \4		618,019			26,973			42,511			31,779			
08001	Tactical Tomahawk Communications (TCOMMS) \3						7	121	847	5	123	615			
08002	Tomahawk Blk IV Integrated Training Architecture								1,995			4,900			
05000	Various (Product Support)		161,702												
	1	ı	1,515,403			52,306			62,951			69,732			

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:
ITEM NO. 108 PAGE NO. 02

**UNCLASSIFIED** 

\2Cost code 07001 (Installation of Equipment) accounts for installs of ATWCS though FY03, and installs of TCOMMS from FY04 through FY09.

\3 Twelve (12) TCOMMS budgeted in FY 2003 in in Cost Code 08000 (Tomahawk Command and Control (TC2S) Product Improvement.

<sup>\1</sup> TTWCS unit cost fluctuations are due to the mix of configurations. TWCS to TTWCS conversions are double the cost of ATWCS to TTWCS conversions. FY 03 unit price increase includes \$7.04M for Life-of-Type buy of HP 744I Processor.

BUDGET PROCURE	MENT HIST	ORY AND	PLANNING EXHIBI	IT (P-5A)		Weapon System		A. DATE <b>Februa</b>	ry 2004	
B. APPROPRIATION/BUDGE Other Procurement, BA4/Ordnance Supp	Navy	ent			C. P-1 ITEM NON Surface Tom BLI 525000	iENCLATURE nahawk Support Equipm	nent		SUBHEAD J4	5A
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	TECH DATA AVAILABLE NOW ?	DATE REVISIONS AVAILABLE
TTWCS 06001 TTWCS										
FY 2003 FY 2004 FY 2005 TCOMMS 08001 TCOMMS	5 5 18	2608 1500 1177	NAVAIR, PAX RIVER NAVAIR, PAX RIVER NAVAIR, PAX RIVER	N/A N/A N/A	C/FPI C/FPI C/FPI	VALLEY FORGE, PA LOCKHEED MARTIN VALLEY FORGE, PA LOCKHEED MARTIN VALLEY FORGE, PA LOCKHEED MARTIN VALLEY FORGE, PA	MAR 03 DEC 03 MAR 05	OCT 03 JUL 04 OCT 05	YES YES YES	
FY 2004 FY 2005	7 5	121 123	NMSO NMSO	Dec-03 Dec-04	CPFF CPFF	COMGLOBAL INC SAN JOSE, CA COMGLOBAL INC SAN JOSE, CA	APR 04 APR 05	NOV 04 NOV 05	YES YES	

#### D. REMARKS

\*FY 2003-2005 TTWCS unit cost fluctuations are due to the mix of configurations. TWCS to TTWCS conversions are double the cost of ATWCS to TTWCS conversions. FY 03 unit price increase includes \$7.04M for Life-of-Type buy of HP 744I Processor.

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST Classification:

ITEM NO. 108 PAGE NO. 03

**UNCLASSIFIED** 

FY 2004/2005 BUDGET PRO			HEDU	JLE, P	-21													DATE			Fe	bru	ary	2004 IRE  Total  13 10 14 14 14 IAR 2004 LENDAR YEAR A M J P A U R Y N  A A B A B A B A B A B A B A B A B A B						
APPROPRIATION/BUDGET A OTHER PROCUREMEN													Wea	apon	Sys	stem		P-1	ITEN	1 NC	ME	NCL	ATL.	JRE						
							Pro	duc	tion	Rate					Pro	cure	eme	nt Le	eadtir	nes										
		Ма	nufact	urer's									ıq T.			T Af			Initia		R	eorc	ler					Un	it of	
Item		Name	and I	_ocati	on	M	SR	EC	ON	MA	١X	to	Oct	1	(	Oct 1		M	lfg PL	_T_	М	lfg P	LT		Tota	ıl		Mea	sure	Э
TTWCS FY 03					VF, PA					20						6			7								EAG			
TTWCS FY 04					VF, PA					20						3			7								EAG			
TCOMMS 03			BAL IN			5/Y		N I / A		21						7			7								EA			
TCOMMS 04	CON	IGLO	BAL IN	IC, SJ	, CA	N/A	١	N/A		N/A						7			7								EAG	<u>CH</u>		
									FI	SCAL Y	/EAR											FISC								
ITEM / MANUFACTURER	F	S	Q	D	В		2002				1		CALE	NDAR	YEAF	R 2003	3			1		1	CA	LEND	AR Y	EAR 2	2004			1 _
	Υ	V C	T Y	E L	A L	0	N	D	J	F	М	Α	М	J	J	Α	S	0	N	D	J	F	М			J	J	Α	S	B
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TTWCS	03		5	0	5						Α							1	1	1	1	1								
TTWCS	04		5	0	5															Α							1	1	1	2
																												<u> </u>		L
T0011110			<b>-</b>																											Ł.
TCOMMS	04	N	7	0	7																			Α				-		7
																												_		H
										FISC	AL YE	EAR 2	2005									FISC	AL YI	AR :	2006					
ITEM / MANUFACTURER	F	s	Q	D	В		2004						CALE	NDAR	YEAF	R 2005	5						CA	LENE	AR Y	EAR 2	2006			1
	Υ	V	Т	Ε	Α	0	N	D	J	F	М	Α	М	J	J	Α	S	0	N	D	J	F	М	Α	М	J	J	Α	S	В
		С	Υ	L	L	C	0	Е	A	Ē	Α	Р	Α	Ŭ	Ü	U	Е	С	0	Е	Α	Е	Α	Р	Α		Ü	U	Е	A L
						Т	V	С	N	В	R	R	Υ	N	L	G	Р	Т	V	С	Ν	В	R	R	Υ	N	L	G	Р	
TTWCS	04		5	3	2	1	1																							L
TTWCS	05		18	0	18						Α							2	2	2	2	2	2	2	2	2		-		┢
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TCOMMS	04		7	0	7		2	2	2	1																				
TCOMMS	05		5	0	5							Α							2	2	1							<u> </u>		┖
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Remarks: FY 2003 are LRIP						-	1				1	-				<u> </u>				1	-	1	-	-		1	-		I	_

DD Form 2445, JUL 87 Previous editions are obsolete P-1 SHOPPING LIST

311/244 ITEM NO. 108 PAGE NO. 04 Exhibit P-21 Production Schedule

DD Form 2454, JUN 86

BUDO	SET ITEM	JUST	IFICATION	SHEET			DATE:				
		P-40	0					F	ebruary 20	04	
APPROPRIATION/BUDGET ACTIVIT	ΓY					P-1 ITEM NO					
OTHER PROCUREMENT, NA	VY					Sub	marine To	mahawk S	upport Equ	uipment (J4	15B)
BA4/Ordnance Support Equi	pment					BL	.l:525500				
Program Element for Code B Items:						Other Relate	d Program El	ements			
	Prior	ID								То	
	Years	Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Total
QUANTITY											
COST (In Millions)	\$127.0		<b>\$5.1</b>	\$5.7	\$5.5	\$7.1	\$8.2	\$8.7	\$9.2	\$60.0	\$236.6

Submarine-Advanced Tomahawk Weapon Control System (Sub-ATWCS) (02000) provides open system architecture, extensive hardware (TAC-X) processors, Common Display Console Unit, racks, cables, connectors, etc., and software commonality with surface systems. Sub-ATWCS installation on 688 class submarines is a prerequisite for installation on the VIRGINIA class submarine.

Submarine-Tactical Tomahawk Weapon Control System (Sub-TTWCS/TCOMMS) (02001) provides all capabilities associated with Submarine ATWCS and accommodates the Tactical TOMAHAWK variant. TTWCS hardware for submarines will support the following functions. Receipt of Over the Horizon (OTH) tracking data external to TTWCS; Engagement Planning, Inventory Management of missiles, Strike Planning, Interface with the Combat Control System to transfer engagement plans, TOMAHAWK Mission data, and flight software. TTWCS hardware will be converted to the J6000 Processor as part of the integration into the Submarine Command and Control System.

Weapons Control System Product Support (WCS) (02002) provides for COTS/GOTS refreshment, engineering changes, software support, testing and infrastructure to maintain compatibility and interoperability with existing and future systems. The TCOMMS PcMDS (TLAM Core Responsibilities) as well as the J6000 processor conversion requirements are included in this line.

CLASSIFICATION:

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ITEM NO. 109

PAGE NO. 01

	WEAPONS SYSTEM C P-5	COST ANA	LYSIS			Weapon Sy	stem						DATE: <b>February</b>	2004	
Other F	PRIATION/BUDGET ACTIVITY Procurement, Navy Idnance Support Equipment							e Tomaha	JRE/SUBHEAI W <b>k Suppo</b> r		ent (J45B	)			
				25500		•									
COST	ELEMENT OF COST	ID Code	Prior Years Total Cost	Quantity	FY 2003 Unit Cost	Total Cost	Quantity	FY 2004 Unit Cost	Total Cost	Quantity	FY 2005 Unit Cost	Total Cost			
02000	Submarine-ATWCS Production Engineering		122,657 1,391				,			,					
02001	Submarine-TTWCS/TCOMMS		2,143			2,660			4,614			4,288			
02002	WCS Product Support		814			2,474			1,129			1,181			
	M 2446 II IN 86		127,005			5,134			5,743			5,469			

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:
ITEM NO. 109 PAGE NO. 02

\*FY 2002 TTWCS PROCUREMENT WAS REDIRECTED BY N77 TO FUND TACTOM SUBMARINE HARDWARE CONVERSION FROM TTWCS SUITES TO SUBMARINE CCS MK2 J6000 PROCESSORS.

**UNCLASSIFIED** 

### **UNCLASSIFIED**

		E	BUDGET ITEM JUSTIFICA P-40	ATION SHEE	Т			DATE:	FEBRU <i>A</i>	ARY 2004	
APPROPRIATION/BU	DGET ACTIVIT	Υ				P-1 ITEM NOM	ENCLATURE B	LI 5260			
OTHER PROCUR	EMENT, NA	VY/BA-4	Ordnance Support Equi	pment		VERTICAL I	AUNCH SYS	STEM			
Program Element for C	Code B Items:					Other Related	Program Elemer	nts			
	Prior Years	ID Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
QUANTITY			N/A	N/A	N/A	N/A	N/A	N/A	N/A		
COST (In Millions)		Α	\$5.3	\$7.8	\$9.8	\$9.0	\$6.9	\$7.0	\$7.1		\$53.0
SPARES COST (In Millions)			\$0.8	\$0.4	\$0.8	\$0.5	\$0.5	\$0.5	\$0.5		\$4.1

#### **SUBMARINES**

The SSN-688 Class Vertical Launch System (VLS) is a weapons system which provides the SSN-688 Class submarines with the capability to carry, status, preset, and launch up to twelve TOMAHAWK cruise missiles from vertical tubes located in the forward non-pressure hull area. This weapons system is being added to all SSN-688 Class submarines starting with SSN-719 in FY 86 with out degrading any existing SSN-688 Class weapons system capabilities or submarine operational characteristics. The VLS launches TOMAHAWK conventional land attack cruise missiles. The TOMAHAWK cruise missile was modified to allow operation in a vertical orientation. VLS was procured and installed under the SCN appropriation. VLS support, test, and handling equipment are provided by this OPN P-1 line item.

The AUR Simulator is a test and training device that is loaded into a missile tube to simulate an operational Encapsulated TOMAHAWK Vertical All Up Round (AUR) allowing the VLS to be exercised through the launch phase without actually launching a missile. The AUR Simulator consists of an AUR Electronic Simulator enclosed in a Volumetric Shape. The AUR Electronic Simulator (AURES) simulates the AUR operations either while installed in the Volumetric Shape or in the stand-alone mode via electrical umbilical connection. The Volumetric Shape simulates the weight and shape of an operational AUR, provides a watertight, pressure-proof enclosure for the AURES, and interfaces with the missile tube in a manner similar to an operational AUR so that no damage to the tube will occur during simulation. The missile tube bore gauge is used to verify the proper missile tube clear bore to ensure compatibility with the TOMAHAWK AUR. The AUR loader is a funnel-shaped device which mounts to the missile tube muzzle face. It acts as a guide for the AUR and provides the mechanism to push the AUR down during loading and pull the AUR out of the missile tube during unloading. The Missile Tube Control Panel (MTCP) (SSN 719-725, 750) and the Tube Control Panel (TCP) (SSN 751-773) display the status of the missile tubes, controls the operation of the missile tube hatches, and displays the status of various subsystems.

Legacy items include procurement of Peculiar Support Equipment (PSE) All Up Round Volumetric Shapes, procurement of PSE support equipment, MK 101 Mod 5 upgrade, hydraulics block upgrade modification and hall switch modifications.

Two TCP modifications have been combined and stretched in schedule. Also, two fairing modifications have been combined and stretched in schedule.

Long-term changes include: Improved AURVS cable. Improved AURVS Junction Box. Ballast Can covers due to removal problems with existing plug. Improved Ballast Can pads. Platform tent. Commencement of a Mod 5 MK 101 upgrade. Special test equipment. Hall switch upgrade. Improved Fairing Lock Cylinder modification. Hydraulic Actuator pipe flange modification.

P-1 SHOPPING LIST

ITEM NO. 110

PAGE NO. 1

CLASSIFICATION:

UNCLASSIFIED

DD Form 2454, JUN 86

			BUD	GET ITEM	<b>JUSTIFICA</b>	TION SHEET	-				DATE:	
					P-40						FEBRUA	RY 2004
APPROPRIATION/BUDG	GET ACTIVITY				P-1 ITEM NO	MENCLATURE						
OTHER PROCURE	MENT,NAVY	/BA-4				VER	TICAL LAUN	NCH SURFA	CE SYSTEM	1/A45A BLI#	5260	
Program Element for Co	de B Items:				Other Related	Program Elem	ents					
	FY 2001										_	<b>T</b>
	and Prior	ID									То	Total
		Code		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Program
QUANTITY				N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A
COST (\$M)				\$5.3	\$7.8	\$9.8	\$9.0	\$6.9	\$7.0	\$7.1		\$53.0
Initial Spares (\$M)				\$0.8	\$0.4	\$0.8	\$0.5	\$0.5	\$0.5	\$0.5		\$4.1

PROGRAM OVERVIEW:

#### **SURFACE**

The MK-41 Vertical Launching System (VLS) is a surface combatant missile launching system, designed to store, select and launch various STANDARD Missile configurations, TOMAHAWK, Tactical TOMAHAWK, EVOLVED SEASPARROW (ESSM) and Vertical Launch ASROC (VLA) missiles. The MK-41 VLS significantly improves missile capacity, flexibility, multi-mission capability, reaction time and rate of fire and is designed to be adaptable to present and future weapon systems. Current configurations are: two 61 cell launchers, forward and aft, for 22 TICONDEROGA (CG 47) Class Cruisers beginning with CG-52; one 61 cell launcher forward for 5\* SPRUANCE (DD 963) Class Destroyers; one 61 cell aft and one 29 cell launcher forward for 28 ARLEIGH BURKE (DDG 51) Class Destroyers; and one 64 cell launcher aft and one 32 cell launcher forward for 32 DDG 51 FLT IIA ships.

The OPN requirements are to procure ORDALT kits and fund government field activity support for ORDALT installation planning, provide sustaining engineering support to MK-41 VLS ships in the fleet, and procure test equipment/special tool replacement in support of ship ROH/SRA testing. The MK-41 VLS program has requirements to: Procure ORDALTs for SM-2 BLK IV for DDG-51 and CG-47 classes; Conduct engineering investigations of 8 to 12 inadvertent deluges and 4 to 6 missile duds per year in order to minimize future material damage; Collect, investigate, and prioritize computer program trouble reports; Investigate discrepancies in, update, and correct shipboard Allowance Equipment Lists (AELs), Consolidated Onboard Ship Allowance Lists (COSALs), and configuration lists; Provide ORDALT production engineering support.

The increase in FY05-07 are for the procurement of Safety Ordnance Alterations.

\* 19 SPRUANCE (DD-963) Class Ships are being decommissioned through FY04 bringing the total to 5 DD-963s.

DD Form 2454, JUN 86

P-1 SHOPPING LIST Item No. 110 CLASSIFICATION:

**UNCLASSIFIED** 

	WEAPONS SYSTEM COST ANAL P-5	YSIS			We	apon Syst	em							DATE: FEBRUA	ARY 2004
Other P	RIATION/BUDGET ACTIVITY rocurement, Navy					ID Code	P-1 ITEM NO	MENCLATUR	E/SUBHEAD					SUBHEAD	
BA-4 Oı	dnance Support Equipment						Vertical La	aunch Syste	ems	BLI: 52	6000				A45A
				IN THOUSAN	NDS OF DOLLA	IRS									
COST CODE	ELEMENT OF COST	ID Code	Prior Years					FY 2003			FY 2004			FY 2005	
			Total Cost				Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	SUBMARINES N-77														
5A101	AUR ELECTRONIC SIMULATOR Shape/skid Assembly	Α								5	257	1,285			
	Additional skids												46	26	1,196
	Internal Load Bank Thermal Protection Improved AURVS Cable						1	70	70	9	10	90	27	10	270
	Improved AURVS Junction Box						1	30	30	9	7	63	27	7	189
	Improved Ballast Can Covers						1	40	40	22	4	88	57	4	228
	Improved Ballast Can Pads						1	40	40	22	3	66	57	3	171
	Improved Platform Tent						1	55	55	3	6	18	7	6	42
5A102	AUR ELECTRONIC SIMULATOR	Α													
	Tactical Tomahawk Kit Mod 4						70	20	1,400	49	19	931	28	19	532
	Mod 5 TBD												1	608	608
5A107	LOADING SUPPORT EQUIPMENT	Α													
	Miscellaneous support equipment								416			37			76
5A116	FACILITY HARDWARE	A							25			46			48
	SUBTOTAL (SUBMARINES N-77)	1			+				2,076			2,624			3,36

DD FORM 2446, JUN 86 CLASSIFICATION:

110 PAGE NO.

ITEM NO.

3

**UNCLASSIFIED** 

	WEAPONS SYSTEM COST ANA P-5	ALYSIS				Weapon S								DATE: FEBRUA	RY 2004
	PRIATION/BUDGET ACTIVITY Procurement, Navy					ID Code	P-1 ITEM N	IOMENCLATU	RE/SUBHEAD	)				SUBHEAD	
	rdnance Support Equipment						Vertical I	_aunch Sys	tems	BLI: 526	000				A45A
			TOTAL COS	T IN THOUS	SANDS OF DO	OLLARS									
COST	ELEMENT OF COST	ID Code	Prior Years					FY 2003			FY 2004			FY 2005	
OODL		Oddc	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cos
5A118	SHIPALT MATERIAL														
	TCP Phase II						7	221	1,547	1	300	300	2	300	600
	4143 KP MFD 3/9 Handwheel									7	0.6	4.2		005	005
	Fairing Block Upgrade Hydraulic Block Upgrade									1	600 650	600 650	1	295	295
	Hall Switch									'	650	050	1	134	134
5A6IN	NON-FMP INSTALLATIONS														
5AINS	FMP INSTALLATIONS								1,260			1,669			1,570
	SUBTOTAL (SUBMARINES N-77)	)				0		PPING LIS	4,883			5,847	CLASSIFI		5,959

P-1 SHOPPING LIST ITEM NO.

110

PAGE NO.

**UNCLASSIFIED** 

## **UNCLASSIFIED**

		M COST AN -5	NALYSIS			Weapon Sy	stem							DATE: FEBRUA	RY 2004
	RIATION/BUDGET ACTIVITY					ID Code	P-1 ITEM N	OMENCLATU	RE/SUBHEAD	)				SUBHEAD	
Other Pr	ocurement, Navy							VEDTION			OVOTEN	D1.14	F000		
	T		TOTAL COS	T IN THOUS	ANDS OF DO	IIAPS		VERTICAL	LAUNCH S	URFACE	SYSIEM	BLI#	5260		A45A
				T IN THOUS	ANDS OF DO	LLANG									
COST	ELEMENT OF COST	ID Code	Prior Years					FY 2003			FY 2004			FY 2005	
CODE		Code	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Co
	SURFACE N76														
5A003	VLS ORDALTS								120			685			3,
5A830	PRODUCTION ENGINEERING								222			1,161			
5A870	SPEC TOOLING/TEST EQUIP								0			0			
5A900	CONSULTING SERVICES								0			0			
5A5IN	FMP INSTALLATION								58			124			
	SUBTOTAL (SURFACE N76)								400			1,970			3,
	TOTAL		0			0			5,283			7,817			9,

PAGE NO.

ITEM NO.

# **UNCLASSIFIED**

n	Weapon System	A. DATE FEBRUARY	2004
	TEM NOMENCLATURE 688 CLASS VERTICAL LA 1 AUR ELECTRONIC SI	SUBHEAD	2004
	TRACT THOD CONTRACTOR TYPE AND LOCATION	DATE OF SPECS FIRST AVAILABLE DELIVERY NOW	DATE REVISIONS AVAILABLE
VE/NUWC 11/03 VE/NUWC 11/03 VE/NUWC 11/03	MPET COMPETITIVE/NI MPET COMPETITIVE/NI MPET COMPETITIVE/NI MPET COMPETITIVE/NI	2 4/03 YES 2 4/03 YES 2 4/03 YES	N/A N/A N/A N/A N/A
VE/NUWC 11/03 VE/NUWC 11/03 VE/NUWC 11/03 VE/NUWC 11/03	MPET COMPETITIVE/NI MPET COMPETITIVE/NI MPET COMPETITIVE/NI MPET COMPETITIVE/NI MPET COMPETITIVE/NI	4/04 YES 4/04 YES 4/04 YES 4/04 YES	N/A N/A N/A N/A N/A
VE/NUWC 11/0- VE/NUWC 11/0- VE/NUWC 11/0- VE/NUWC 11/0-	MPET COMPETITIVE/NI MPET COMPETITIVE/NI MPET COMPETITIVE/NI MPET COMPETITIVE/NI MPET COMPETITIVE/NI MPET COMPETITIVE/NI	4/05 YES 4/05 YES 4/05 YES 4/05 YES	N/A N/A N/A N/A N/A

P-1 SHOPPING LIST Classification: DD Form 2446-1, JUL 87 ITEM NO. 110 PAGE NO.

## **UNCLASSIFIED**

BUDGET PROCUREMENT HIS	STORY AND P	LANNING	EXHIBIT (P-5A)			Weapon System		A. DATE	BRUARY	2004
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA ORDNANCE SUPPORT E		Γ			C. P-1 ITEM NOM SSN 688 CL 5A102 AU	ASS VERTICAL LAUNG	CH SYS		SUBHEAD  A45A	2004
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
SUBMARINE		,								
<u>FY2003</u> Tactical Tomahawk Kit	70	\$20	NUWC		COMPET	COMPETITIVE/NUWC	11/02	4/03	YES	N/A
<u>FY2004</u> Tactical Tomahawk Kit	49	\$19	NUWC		COMPET	COMPETITIVE/NUWC	11/03	4/04	YES	N/A
<u>FY2005</u> Tactical Tomahawk Kit	28	\$19	NUWC		COMPET	COMPETITIVE/NUWC	11/04	4/05	YES	N/A

P-1 SHOPPING LIST Classification: DD Form 2446-1, JUL 87 **UNCLASSIFIED** PAGE NO. ITEM NO. 110 7

## **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND F	PLANNING	EXHIBIT (P	?-5A)			Weapon System		A. DATE	BRUARY 2	2004
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-4 ORDNANCE SUPPORT EQUIPMENT	-					L IENCLATURE LASS VERTICAL LAUNO IIPALT MATERIAL	CH SYS	I.	SUBHEAD A45A	2004
Cost Element/ FISCAL YEAR  SUBMARINE	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISION AVAILABL
<u>FY2003</u> FCP Phase 2	7	\$221	NUWC		COMPET	COMPETITIVE/NUWC	11/02	4/03	YES	N/A
FY2004 TCP Phase 2 4143KP MFD 3/9 Handwheel Fairing Block Upgrade Hydraulics Block Upgrade	1 7 1	\$300 \$0.6 \$600 \$650	NUWC NUWC NUWC NUWC		COMPET COMPET COMPET COMPET	COMPETITIVE/NUWC COMPETITIVE/NUWC COMPETITIVE/NUWC COMPETITIVE/NUWC	11/03 11/03	4/04 4/04 4/04 4/04	YES YES YES YES	N/A N/A N/A N/A
FY2005 FCP Phase 2 Fairing Block Upgrade Hall Switch	2 1 1	\$300 \$295 \$134	NUWC NUWC NUWC		COMPET COMPET COMPET	COMPETITIVE/NUWC COMPETITIVE/NUWC COMPETITIVE/NUWC	11/04 11/04 11/04	4/05 4/05 4/05	YES YES YES	N/A N/A N/A

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST Classification:

ITEM NO. 110 PAGE NO. 8 **UNCLASSIFIED** 

CLASSIFICATION: UNCLASSIFIED																						
P3A		INDIVIDUA	L MO	DIFICAT	ION																	
MODELS OF SYSTEM AFFECTED:		751-773			TYPE	E MODIF	ICAT	ION:		KP SHI	PALT	_			MOD	IFICATI	ON TI	TLE:	TCP F	PHASE 2		
DESCRIPTION/JUSTIFICATION:	PLUS	2 SHORE S	ITES																(5A118	3)		
THIS MOD FACILITATES MAINTENANCE	OF TH	IE TCP.																	(0,	·)		
L DEVELOPMENT STATUS/MAJOR DEVELO	OPMEN	IT MILESTO	NES:									-										
	FY 20	001 & Prior	F۱	<u>/ 2002</u>	ΕV	<u> 2003</u>	F۱	<u>/ 2004</u>	ΕV	<u> 2005</u>	F۱	<u> 2006</u>	F۱	<u> 2007</u>	ΕY	2008	FΥ	2009		TC	<u>TO</u>	ΤΔΙ
	QTY			\$	QTY		QTY		QTY		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	<u>TC</u> \$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT	4	1.76	3	1.74	7	1.55	1	0.30	2	0.60	6	1.74	1	0.30	1	0.30					25	8.29
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST						1.20		0.93		0.44		0.46		0.60		0.23					0	3.86
TOTAL PROCUREMENT		1.76		1.74		2.75		1.23		1.04		2.20		0.90		0.53					25	12.15
								ITEM	110	F	PAGE	9							CLAS	SIFICATION	I: UNCLAS	SIFIED

CLASSIFICATIO	N: UNCLA	ASSIF	FIED																											
P3A (Continued)						INDI	VIDUA	AL M	ODIFICAT	ION (	Continue	d)																		
MODELS OF SY	STEMS A	FFEC	TED:		SSN 7			TES	MODI	FICA	TION TITL	Ε:	-	TCP	PHAS	E2 (	5A118)									_				
INSTALLATION I METHOD OF IMI					AIT																									
ADMINISTRATIV	/E LEADTI	ME:			6		Month				LEADTIN		_	8	3 Мо	nths														
CONTRACT DATE	-		2000: 2000:	-	4/99 2/00				FY 2001: FY 2001:		2/9						FY 20 FY 20		_		4/01 2/02									
														(\$ in N	/lillions	s)														
Cost:			ior Ye			Y 200		F	Y 2003		FY 2004			Y 2005	_	FY 20			Y 2007			Y 2008			2009	_	Complete		Tota	
		Qty	\$	<b>i</b>	Qty		\$		Qty	Qty	\$	C	Qty	\$	Qty		\$	Qty	\$		Qty	\$	Q	ty	\$	Qty	/ \$	Qty		\$
PRIOR YEARS								4	1.20																				4	1.20
FY 2002 EQUIP	PMENT									3	0.4	14																	3	0.44
FY 2003 EQUIPI	MENT									4	0.4	19	2	0.44	1		0.23												7	1.16
FY 2004 EQUIP	PMENT														1		0.23												1	0.23
FY 2005 EQUIP	PMENT																	2	(	0.23									2	0.23
FY 2006 EQUIP	PMENT																	5	(	0.37	1	0	.23						6	0.60
FY 2007 EQUIP	PMENT																												0	0.00
FY 2008 EQUIP	PMENT																													0.00
FY 2009 EQUIP	PMENT																													
TO COMPLETE	Ē																												23	3.86
INSTALLATIO	N SCHED	ULE:																												
	FY 2001		1	Y 200	)2			FY 2	003		FY 200	4		FY 2	2005			FY 2	2006			FY 200	7		E)	2008		TC		
	& Prior		1	2	3	4	1	2	3 4	1	2 3		4	1 2	3	4	1	2	3	4	1	2	3	4	1 2	3	4			TOTAL
In	0		0	0	0	0	2	2	0 2	2	2 2		0	2 0	0	0	2	0	0	0	2	2	2	0	1 0	0	0	0		23
Out	0		0	0	0	0	0	2	2 2	1	2 2		1	0 1	1	0	2	0	0	0	1	2 :	2	1	0 1	0	0	0		23
																									P-:	3A				

ITEM 110 PAGE 10

CLASSIFICATION: UNCLASSIFIED																						
P3A		INDIVIDUA	L MO	DIFICAT	ION																	
MODELS OF SYSTEM AFFECTED:	SSN	719-725, 75	50-773	}	TYPE	MODIFIC	CATION	<b>1</b> :		KP SHII	PALT				MOD	IFICATI	IT NC	TLE:			RE STATION	IS
DESCRIPTION/JUSTIFICATION:																			(5A11	8)		
This modification addresses inaccessibility /	limited a	access to so	ome te	st pressi	ure stati	ions.																
L DEVELOPMENT STATUS/MAJOR DEVELO	PMENT	MILESTO	NES:																			
				,							_		_				_	,				
	QTY	001 & Prior \$	QTY	<u>′ 2002</u> \$	QTY	2003 \$	QTY	<u>2004</u> \$	QTY	<u>2005                                   </u>	QTY	<u>2006</u> \$	QTY	<u>/ 2007</u> \$	QTY	<u>2008</u> \$	QTY	<u>/ 2009</u> \$	QTY	<u>TC</u> \$	<u>TOT</u> QTY	<u>IAL</u> \$
FINANCIAL PLAN (IN MILLIONS)																						
_																						
RDT&E																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT	30	0.12																			30	0.12
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST			5	0.05	14	0.14	11	0.11														
TOTAL PROCUREMENT	30	0.12				0.14		0.11		0.00		0.00		0.00		0.00		0.00		0.00	30	0.12
								ITEM	110	F	PAGE	11							CLAS	SIFICATION	V: UNCLAS	SIFIED

CLASSIFICATION: UNC	LAS	SIFIED																									
P3A (Continued)				INDIVID	UAL	MODIFICATION	ON (C	ontinued)																			
MODELS OF SYSTEMS	AFF	ECTED:		719-725, 2 SHORE			DIFICA	ATION TITLI	Ε:		Test	Press	sure S	tations	(5A	.118)								-			
INSTALLATION INFORM																											
METHOD OF IMPLEMEN			SHIP																								
ADMINISTRATIVE LEAD				Months			ION L	EADTIME:			12	. Mor	nths		_												
CONTRACT DATES:		2000:		_		FY 2001:					-			FY 200													
DELIVERY DATE:	FΥ	2000:		-		FY 2001:								FY 200	02:	_											
											(\$ in M	lillions															
Cost:		or Years		Y 2002		FY 2003		FY 2004		FY 20			FY 20			FY 2007			Y 2008			Y 20			omplete		Total
	Qty	\$	Qty	\$	Qt	у \$	Qty	\$	Qty	/	\$	Qty		\$	Qty	\$		Qty	9	<u> </u>	Qty		\$	Qty	\$	Qty	\$
PRIOR YEARS					,	5 0.05	14	0.1	4 1 <sup>-</sup>	1	0.11															30	0.30
FY 2002 EQUIPMENT																											
FY 2003 EQUIPMENT																											
FY 2004 EQUIPMENT																											
FY 2005 EQUIPMENT																										0	0.00
FY 2006 EQUIPMENT																										0	0.00
FY 2007 EQUIPMENT																										0	0
FY 2008 EQUIPMENT																										0	0.00
FY 2009 EQUIPMENT																										0	0.00
TO COMPLETE																										30	0.30
INSTALLATION SCH	DUL	.E:																									,
FY 2000		<u>FY 2</u>	001		<u>F</u>	Y 2002		FY 2003			FY:	2004			FY 2	<u> 2005</u>			FY 20	006			FY 2	2007		TC	
& Prior		1 2	3	4	1 2	3 4	1	2 3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		TOTAL
In 0		0 0	0	0 0	0 0	0 5	5	5 4	0	5	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Out 0		0 0	0	0 (	0 0	0 5	3	3 4	4	3	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	30
																							P-3A				
				·		- I	TEM	110	P	AGE 12										CLAS	SIFIC	CATIC	)N: <b>Ū</b> I	NCLA	SSIFIED	,	

CLASSIFICATION: UNCLASSIFIED																						
P3A		INDIVIDUA	L MO	DIFICAT	ION																	
MODELS OF SYSTEM AFFECTED:	SSN	750-773			TYPI	E MODIF	ICATIO	ON:		KP SHII	PALT	_			MOD	IFICATI	ON TI	TLE:			Handwhee	
DESCRIPTION/JUSTIFICATION:																			(5A118	3)		
This modification corrects a deficiency in the	he MFD	3/9 handwi	heel w	vhich if in	adver	tently bu	mped o	could dis	rupt the	e launch	seque	ence.										
DEVELOPMENT STATUS/MAJOR DEVEL	OPMEN	IT MILESTO	DNES																			
	FY 20 QTY	001 & Prior \$	<u>F`</u> QTY	<u>Y 2002</u> ′\$	<u>FY</u> QTY	<u>/ 2003</u> \$	<u>FY</u> QTY	<u>2004</u> \$	<u>FY</u> QTY	<u>′ 2005</u> \$	<u>F\</u> QTY	<u>/ 2006</u> \$	<u>F`</u> QTY	<u>Y 2007</u> \$	<u>FY</u> QTY	2008 \$	<u>FY</u> QTY	<u>2009</u>	QTY	<u>TC</u> \$	<u>TO</u> QTY	<u>ΓΑL</u> \$
FINANCIAL PLAN (IN MILLIONS)																						
<u>RDT&amp;E</u>																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT			7	0.005			7	0.004													14	0.01
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST						0.00		0.05		0.00		0.00		0.00		0.00		0.00		0.00		0.05
TOTAL PROCUREMENT			7			0.00	7	0.05 ITEM	110	0.00	PAGE	0.00		0.00		0.00		0.00	CLASS	0.00	14 N: UNCLAS	0.05

CLASSIFICATION: UNC	LAS	SIFIED																									
P3A (Continued)				INDIVIDU	AL N	ODIFICATION	ON (C	ontinued)																			
MODELS OF SYSTEMS	AFF	ECTED:		751-773 2 SHORE S	ITES	MOE	DIFICA	ATION TITLE	:		4143	KP M	FD 3/	9 Hand	wheel	<u> </u>											
INSTALLATION INFORM METHOD OF IMPLEMEN			AIT																								
ADMINISTRATIVE LEAD				Months	_	PRODUCT	ION L	EADTIME:			12	Mon	iths		_												
CONTRACT DATES:		2000:		_		FY 2001:								FY 200		_											
DELIVERY DATE:	FY	2000:		-		FY 2001:								FY 200	02:	-											
										(9	in Mi	llions	)														
Cost:		or Years		2002		FY 2003		FY 2004		FY 200			FY 20			FY 200			Y 2008			Y 200			omplete		Total
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty		5	Qty		\$	Qty	9	5	Qty	\$	5	Qty	\$		Qty	\$	Qty	\$
PRIOR YEARS																											
FY 2002 EQUIPMENT			7	0.04	ļ.																					7	0.04
FY 2003 EQUIPMENT																										0	0.00
FY 2004 EQUIPMENT							7	0.045																		7	0.05
FY 2005 EQUIPMENT																										0	0.00
FY 2006 EQUIPMENT																										0	0.00
FY 2007 EQUIPMENT																										0	0
FY 2008 EQUIPMENT																										0	0.00
FY 2009 EQUIPMENT																										0	0.00
TO COMPLETE			7				7																			14	0
INSTALLATION SCHE	EDUL			<del></del>			1										1	-				-					
FY 2001		FY 2				<u>′ 2003</u>		FY 2004			FY 2					2006			FY 20				FY 2			<u>TC</u>	
& Prior		1 2	3	4 1	2	3 4	1	2 3	4	1		3	4	1	2	3	4	1		3	4	1	2	3	4		TOTAL
In 0		0 0	0	0 0	0	0 0	0	3 4	0	3	3	1	0	0	0	0	0	0	0	0	0		0	0	0	0	14
Out 0	J L	0 0	0	0 0	0	0 0	0	3 4	0	0	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	14
																							P-3A				
						- 1	ГЕМ	110	PA	GE 14										CLAS	SIFIC	10ITA:	V: UN	ICLAS	SSIFIED		

CLASSIFICATION: UNCLASSIFIED																						
P3A		INDIVIDUA	L MO	DIFICAT	ION																	
MODELS OF SYSTEM AFFECTED:	SSN	719-725, 75	50-773	3.	TYP	E MODIF	FICAT	ION:		KP SHII	PALT	-			MOD	IFICATION	ON TI	TLE:	Fairing (5A11	g Linkage U	pgrade	
DESCRIPTION/JUSTIFICATION:																		_	•			
This alteration modifies the VLS fairing to I					th pred	dominan	tly off-	shelf har	dware	to provid	le incr	eased a	ccurac	y of adju	stmen	t and elir	minate	e potentia	al bindir	ng and inter	ference area	as.
DEVELOPMENT STATUS/MAJOR DEVELO	OPMEN	IT MILESTO	NES:									-										
	FY 20 QTY	001 & Prior \$	<u>F\</u> QTY	<u>/ 2002</u> \$	<u>F\</u> QTY	<u>/ 2003</u> \$	<u>F\</u> QTY	<u>/ 2004</u> \$	<u>FY</u> QTY	<u>′ 2005</u> \$	<u>F\</u> QTY	<u>/ 2006</u> \$	<u>F`</u> QTY	<u>/ 2007</u> \$	<u>FY</u> QTY	<u>′ 2008</u> \$	<u>F\</u> QTY	<u>/ 2009</u> \$	QTY	TC \$	<u>TO'</u> QTY	<u>ΓΑL</u> \$
FINANCIAL PLAN (IN MILLIONS)																						
<u>RDT&amp;E</u>																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT							1	0.60	1	0.30	2	0.60	3	0.87	1	0.30	3	0.92			11	3.59
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST								0.60		0.30		0.40		0.87		0.45		0.60		5.95		9.17
TOTAL PROCUREMENT		0.00		0.00		0.00	1	1.20 ITEM	110	0.60	2 PAGE	1.00	3	1.74	1	0.75	3	1.52	20 CLAS	2.92 SIFICATION	31 N: UNCLAS	12.75 SIFIED

CLASSIFICATION	I: UNC	LASS	SIFIED																												
P3A (Continued)					INDI	VIDU	AL M	ODIFIC	ATIC	ON (Co	ontinue	d)																			
MODELS OF SYS	STEMS	AFFE	CTED:	SSN 7	719-7	25, 75	0-77	3	MOD	IFICA	TION TI	ITLE:			Fairing	g Bloc	k Up	grade	(5A11	8)											
INSTALLATION IN METHOD OF IMP ADMINISTRATIVE CONTRACT DATE DELIVERY DATE:	LEMEN E LEAD ES:	NTATI TIME FY:	ON:	SHIPA 4 Mor			<u>-</u>	FY 200 FY 200	01:		EADTIM	IE:	-		8	Mon	nths	FY 20						- -							
Cost:		Pric	r Years	F	Y 200	)2		FY 200			Y 2004		F	Y 200	)5	F	Y 20	06	F	Y 20	007	F۱	/ 2008	F	Y 2009	ŀ	Го Сс	mplet	е		Total
3331		Qty	\$	Qty		\$	Qty	\$		Qty	\$		Qty		\$	Qty		\$	Qty		\$	Qty	\$	Qty	\$		Qty	\$		Qty	\$
PRIOR YEARS																															
FY 2002 EQUIP	MENT																													0	0.00
FY 2003 EQUIPM	MENT																													0	0.00
FY 2004 EQUIPM	MENT									1	(	0.60																		1	0.60
FY 2005 EQUIPM	MENT												1		0.30															1	0.30
FY 2006 EQUIPM	MENT															2		0.40												2	0.40
FY 2007 EQUIP	MENT																		3		0.87									3	0.87
FY 2008 EQUIP	MENT																					1	0.45							1	0.45
FY 2009 EQUIP	MENT																							3	(	0.6				3	0.60
TO COMPLETE																											20		5.95	20	5.95
INSTALLA <u>TION</u>	N SCHE	DUL	E:											<u> </u>				<u> </u>													
	2000		FY 2					2003			FY 20				FY 2					2006			FY 2007		_	Y 20				<u>TC</u>	
&	Prior		1 2	3	4	1		3	4	1	2	3	4	1	2	3	4	1	2	3		1	2 3	4		2	3	4			TOTAL
In Out	0		0 0	0	0	0	0	0	0	1 0	0 1	0	0	1 0	0 1	0	0	1 0	1 1	0	0	1 0	1 1	0	-	1 0	0 1	0		23 23	31 31
Out	U		0 0	U	U	U	U	U							'	U	U		1	1	0	U	<u> </u>		P-	3A	-		-	23	31
									ıΤ	EМ		110	DAG	SF 16									(:I A:	SSIE10	CATION	111	ιι τι Δ'	SSIEIF	-1)		

CLASSIFICATION: UNCLASSIFIED																						
P3A		INDIVIDUA	L MO	DIFICAT	ION																	
MODELS OF SYSTEM AFFECTED:	SSN	719-725, 75	0-773	3.	TYP	E MODIF	FICAT	ION:		KP SHII	PALT	-			MOD	IFICATION	ON TI	TLE:	Hydra (5A11	ulics Block I	Jpgrade	
DESCRIPTION/JUSTIFICATION:																		_	`	,		
This alteration modifies the VLS fairing to I					th pred	dominant	ly off-	shelf har	dware	to provid	le incr	eased a	ccurac	y of adju	stmen	t and elir	minate	e potentia	al bindir	ng and inter	ference area	as.
DEVELOPMENT STATUS/MAJOR DEVELO	OPMEN	IT MILESTO	NES:									-										
	FY 20 QTY	001 & Prior \$	<u>F\</u> QTY	<u>/ 2002</u> \$	<u>F\</u> QTY	<u>/ 2003</u> \$	<u>F\</u> QTY	<u>/ 2004</u> \$	<u>FY</u> QTY	<u>′ 2005</u> \$	<u>F\</u> QTY	<u>/ 2006</u> \$	<u>F`</u> QTY	<u>/ 2007</u> \$	<u>FY</u> QTY	<u>2008</u>	<u>F\</u> QTY	<u>/ 2009</u> \$	QTY	TC \$	<u>TO'</u> QTY	TAL \$
FINANCIAL PLAN (IN MILLIONS)																						
<u>RDT&amp;E</u>																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT							1	0.65			1	0.31	1	0.31	2	0.64	1	0.32	25	5.93	31	8.16
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST								0.00		0.83		0.00		0.35		0.46		0.72		9.93		12.30
TOTAL PROCUREMENT		0.00		0.00		0.00	1	0.65 ITEM	110	0.83	1 PAGE	0.31	1	0.67	2	1.10	1	1.05	25 CLAS	15.86 SIFICATION	31 N: UNCLAS	20.46 SIFIED

CLASSIFICATION: I	JNCL	ASS	IFIED																											
P3A (Continued)					INDI	VIDU	AL M	ODIFICA	TION	Cor	ntinued)																			
MODELS OF SYSTE	MS A	AFFE	CTED:	SSN	719-7	25, 75	0-77	3M	ODIFI	CAT	ION TITLE	:		Hydra	ulics l	Block	Upgra	de (5	A118)											
INSTALLATION INFO METHOD OF IMPLE ADMINISTRATIVE L CONTRACT DATES: DELIVERY DATE:	MEN EADT	TATION FY 2	ON: : : : : : : : : : : : : : : : : :	SHIP/ 4 Mor				PRODU FY 2001 FY 2001	:	LE	ADTIME:			8	Mor	nths	FY 2 FY 2						<u>-</u>							
	in M		,		->/ 00	00		F\/ 0000	-	_		1	<u> </u>	\ <u>\</u>		->/ 00/	20		->/ 000	· - 1			1	<u> </u>		<del>-</del> -				<del>-</del>
Cost:		Prior `	rear <b>\$</b>	Qty	FY 20		Qty	FY 2003 \$	Q		/ 2004 \$	Qty	FY 20	\$ \$	Qty	Y 200	)6 }	Qty	Y 200	) <i>/</i>	Qty	Y 2008 \$	Qty	FY 2009 \$		Qty	mplet \$		Qty	Total \$
PRIOR YEARS		Q.y	•	Q.y		Ψ	Q.y	Ψ		,	Ψ	Qiy		Ψ	Q.iy		ν	Qiy	`	,	<u>u.y</u>	*	Q.,	Ψ		Q.y	Ψ		Q.y	Ψ
FY 2002 EQUIPME	NT																												0	0.00
FY 2003 EQUIPME	NT																												0	0.00
FY 2004 EQUIPME	NT											1		0.83	1														1	0.83
FY 2005 EQUIPME	NT																												0	0.00
FY 2006 EQUIPME	NT																	1		0.35									1	0.35
FY 2007 EQUIPME	NT																				1	0.46							1	0.46
FY 2008 EQUIPME	NT																						2	C	.72				2	0.72
FY 2009 EQUIPME	NT																									1		0.36	1	0.36
TO COMPLETE																										25		9.57	25	9.57
INSTALLA <u>TION S</u>	<u>CHE</u> I	DULE	Ē:																											
FY 20	01		FY 2	002			FY	2003			FY 2004			FY 2	2005			FY:	<u> 2006</u>			FY 2007		<u> </u>	Y 20	800			<u>TC</u>	
& Pri	ior		1 2	3	4	1			— I —		2 3	4		2	3	4	1	2	3	4	1	2 3	4	1 — —	2	3	4			TOTAL
In 0 Out 0			0 0	0	0	0	0				0 0 0	0	1 0	0	0	0	0	0	0	0	1	1 0	0		0	0	0		25 25	31 31
- Gut <u>  0</u>			0 0	<u> </u>	0	U	U	<u> </u>	<u> </u>	<i>)</i>	0 0	U	I [_U_			U	_ 0	<u> </u>	<u> </u>	U	U	I I	<u> </u>	<u> </u>	-3A	<u> </u>	<u> </u>		20	31
									ITEN		110	DA	05.40									CLA	CCIEI			NCI A	COIEII	<u> </u>		

ITEM 110 PAGE 18

CLASSIFICATION: UNCLASSIFIED																						
P3A		INDIVIDUA	L MOI	DIFICAT	TION																	
MODELS OF SYSTEM AFFECTED:	SSN	719-725, 75	0-773		TYPE	E MODIF	FICAT	ION:		KP SHIF	PALT	_			MOD	IFICATION	ON TI	TLE:	Hall S			
DESCRIPTION/JUSTIFICATION:																			(5A11	8)		
This alteration replaces internal glass-body positioning of present magnets, and allow the second sec										h actuate	ed by a	a single p	pole m	nagnetic f	ield to	provide	ease	of manu	facture	, eliminate r	magnet rotat	tional
L DEVELOPMENT STATUS/MAJOR DEVELO	PMEN	IT MILESTO	NES:									_										
	FY 20 QTY	001 & Prior \$		<u>′ 2002</u> \$	<u>FY</u> QTY	<u>2003</u>	<u>F\</u> QTY	<u>/ 2004</u> \$	<u>FY</u> QTY	<u>2005</u>		<u>/ 2006</u> \$	<u>F`</u> QTY	<u>/ 2007</u> \$		<u>2008</u>		<u>2009</u>	QTY	TC \$	TO	<u>TAL</u> \$
FINANCIAL PLAN (IN MILLIONS)		-																				
RDT&E																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT									1	0.13	5	0.35	6	0.43	6	0.43	5	0.36			23	1.70
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST												0.27		0.25		0.60		0.30		1.28		2.70

6

0.25 6 0.60 5 0.43

1.63

CLASSIFICATION: UNCLASSIFIED

4.40

TOTAL PROCUREMENT

CLASSIFICATION: U	INCLA	SSIFIED																										
P3A (Continued)				INDI	VIDU	AL M	ODIFICA	TION (	Contir	nued)																		
MODELS OF SYSTE	MS AF	FECTED:	SSN	719-7	25, 75	50-77	3M	DDIFIC	OITA	N TITLE	i:		Hall S	Switch	n (5A1	18)								_				
INSTALLATION INFO METHOD OF IMPLEM ADMINISTRATIVE LE	<b>JENT</b>	ATION:	SHIP.			=	PRODUC	CTION	LEAD	TIME:			6	Mor	nths													
CONTRACT DATES:	F	Y 2000:				_	FY 2001:				•					FY 20	002:											
DELIVERY DATE:	F	Y 2000:		=			FY 2001:						(\$ in	Millio	ne)	FY 20	002:	=				=						
Cost:	Р	rior Years	T F	Y 200	2		FY 2003		FY 20	004	F	Y 200			FY 200	າ6		FY 200	7	F	Y 2008		FY 2009	То	Comple	ete		Total
	Qt		Qty			Qty	\$	Qty		\$	Qty		\$	Qty		\$	Qty	\$		Qty	\$	Qty		Qty		\$	Qty	\$
PRIOR YEARS																												
FY 2000 EQUIPMEN	ΙT																											
FY 2001 EQUIPMEN	1T																											
FY 2002 EQUIPMEN	1T																											
FY 2003 EQUIPMEN	1T																											
FY 2004 EQUIPMEN	1T																											
FY 2005 EQUIPMEN	١T													1		0.27											1	0.27
FY 2006 EQUIPMEN	١T																5		0.25								5	0.25
FY 2007 EQUIPMEN	1T																			6	0.60	)					6	0.60
FY 2008 EQUIPMEN	١T																					6	0.	30			6	0.30
FY 2009 EQUIPMEN	١T																								5	0.49	5	0.49
TO COMPLETE																								- 1	8	0.79	8	0.79
INSTALLATION SO																												
FY 200 & Prio			2002	4	_		2003	$\  \ _{\mathbf{A}}$	_	2004	4	1	<u>FY 2</u>			_		<u>Y 2006</u>	4		FY 2007	4		Y 2008			<u>TC</u>	TOTAL
	<u>"</u>	1 2 0 0	<u>3</u> 0	- 4	0	<u>2</u> 0	<u>3</u> <u>4</u>		_ <u>2</u> 0	0	<u>4</u> 0	0	0	<u>3</u> 0	0	1	0	3 0	0	3	$\frac{2}{2}$ $\frac{3}{0}$	<u>4</u> 0		$\frac{2}{2} \frac{3}{2}$			19	TOTAL 31
In 0 Out 0		0 0	0	0	0	0	0 0			0	0	0	0	0	0	0	1	0	0	1	2 2	0					19	31
		0 0		<u> </u>		<u> </u>	5 (	<u>'                                    </u>	<u> </u>	<u> </u>	<u> </u>		<u> </u>		<u> </u>			0	<u> </u>	<u>                                   </u>			1 0 2				13	
																							P-3	ЗA				

ITEM 110 PAGE 20

#### INDIVIDUAL MODIFICATION

MK-41 Vertical Launch Surface St TYPE MODIFICATION:

MK-41 Verticial Launching System

MODIFICATION TITLE:

MK-41 VLS ORDALTS FEBRUARY 2004

providing launch capability for newer missile variants as well as greater reliability, operability and maintainability.

PMENT MILESTONES:

FY 2001 & Prior	FY 2002	FY 2003	FY 2004		2005		2006		2007	FY	2008	FY	2009		<u>TC</u> \$	<u>TO</u>	TAL
		\$ (	QTY \$	QTY	\$	QTY	\$	QTY	\$			QTY	\$	QTY	\$	QTY	\$
																	0.0
																	0.0
																	0.0
		var 0.1	var 0.7	var	3.1	var	2.3	var	0.5	var	0.5	var	0.5			var	7.6
																	0.0
																	0.0
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																	0.0
																	0.0
																	0.0
		0.0	0.0		0.0		0.0		0.0		0.0		0.0				0.0
		0.2	1.2		0.7		0.6		0.2		0.2		0.2				3.3
		0.000	0.000		0.000		0.000		0.000		0.000		0.000				0.0
		0.1	0.1		0.0		0.1		0.1		0.1		0.1				0.4
		0.4	2.0		3.9		2.9		0.7		0.7		0.7				11.3

ITEM 110

PAGE

21

CLASSII ICATION.	. 011	OLAC	/OII IL																									
P3A (Continued)				INDIVI	DUAL	. MODIFIC	OITA	N (Contin	ued)																			
MODELS OF SYSTEMS A	FFECT	ГЕD: <u>D</u>	D963/C	G47/DE	)G51 (	<u>Cl</u> ass	МО	DIFICAT	ION T	ITLE:	MK-4	1 Ve	tical La	unchir	ng S	ystem			FEE	BRUAR	RY 200	)4						
INSTALLATION INFORMA	ATION:																											
METHOD OF IMPLEMENT	OITAT	١:	AIT		_																							
ADMINISTRATIVE LEADT	IME:		6 Mo	nths		PRODU	CTION	I LEADTI	ME:		18	Mon	ths															
CONTRACT DATES:	FY 2	2000:				FY 2001	:						F	Y 200	2:													
DELIVERY DATE:	FY 2	2000:		_		FY 2001	:				_		F	Y 200	2:								_					
											- (\$ ir	n Millio	ons)										_					
Cost:	_	r Years		2002		Y 2003		FY 2004		FY 20			Y 2006			Y 2007		FY 20			Y 2009			omplet			Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Q	ty	\$	Qty	\$	C	lty	\$	Qty		\$	Qty	5	5	Qty	\$		Qty	\$	
PRIOR YEARS																											0.0	
FY 2001 EQUIPMENT			var																							var	0.0	
FY 2002 EQUIPMENT					var	0.1	ı																				0.1	
FY 2003 EQUIPMENT								0.	1																		0.1	
FY 2004 EQUIPMENT									va	r	0.0																0.0	
FY 2005 EQUIPMENT												var		0.1													0.1	
FY 2006 EQUIPMENT														Vā	ar	0.	1										0.1	
FY 2007 EQUIPMENT																	var		0.1								0.1	
FY 2008 EQUIPMENT																				var		0.1					0.1	
TO COMPLETE																												
INSTALLATION SC	HEDUL	_E:				,							į															
FY 2000	)	FY 20	01		FY 20	002	FY	2003		FY	2004			FY 200	<u>)5</u>		FY 200	<u>06</u>		FY 2	2006	<u> </u>	Y 20	<u>07</u>			TC	TOTAL
& Prior	1	2 3	3 4	1	3	4 1	2	3 4	4	1 2	3	4	1	2	3	4 1	3	4	1	2	3	4	1	2	3	4		
IN 0	0	0 0	0	0	0	0 0	0	0	0   (	0 0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	_ 0	0	0	0	0
OUT 0	0	0 0	0	0	0	0 0	0	0	0 (	0 0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
																								- F	P-3A			

ITEM 110 PAGE 22

BUDGET	ITEM JUSTIFICATION SHEE	т				DATE	February 200	4
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/ Budget Activity 4 - Ordnance Sup	nort Fauinment			OMENCLATU Strategic M		ems Equipr	ment (53580	00)
Dauget Activity + Cranance Cap	port Equipment	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09
QUANTITY								
Cost (in millions)		\$73.3	\$103.1	\$102.1	\$142.9	\$120.2	\$127.3	\$92.7

The SSP funding in this P-1 line provides for the procurement of Strategic Weapons System (SWS) equipment for deployed SSBNs and shore support sites to support the TRIDENT II (D5) program

#### OTHER MATERIAL SUPPORT

A broad range of other material support equipment must be procured for deployed SSBNs, shore installations and contractor facilities. Included within this category are general and special purpose test equipment, launcher expendables, navigation principal items, test instrumentation in support of missile flight tests, and missile checkout equipment. Amounts included within this P-1 line for this category are subdivided as follows:

	(\$00	00)	
	FY 2003	FY 2004	FY 2005
Launcher and Handling Equipment	1,320	25,700	9,700
Fire Control Equipment	3,200	3,500	4,300
Navigation Equipment	3,000	2,800	1,600
Instrumentation/Missile Checkout Equipment	1,050	1,200	8,500
Total	\$8,570	\$33,200	\$24,100

Launcher and Handling Equipment: Funding in FY 2003 - FY 2005 is required to procure Launcher Expendables (namely, MK-74 Gas Generators and Launch Tube Closures). In FY 2004 and FY 2005, funding is also requested to outfit an East Coast shipyard with the launcher and handling equipment needed to establish a TRIDENT SSBN Engineered Refueling Overhaul (ERO) capability.

Fire Control Equipment: Funding in FY 2003 - FY 2005 provides for procurement of MK-98 Mod 4 Fire Control System and Support Equipment replacement items onboard SSBNs and at shore sites and for implementation of Capital Maintenance Projects at the Naval Industrial Reserve Ordnance Plant (NIROP) in Pittsfield, MA; these projects are essential to correct environmental, safety and energy conservation deficiencies.

Navigation Equipment: Funding is required in all years for replacement of worn or damaged items of inertial test equipment used at contractors' plants to support test, evaluation, and analysis of inertial instruments; and for procurement of critical components essential to maintain configuration control and equipment reliability.

Instrumentation/Missile Test Equipment: Funding in all years provides for shorebased and shipboard test instrumentation equipment in support of missile flight tests and for procurement of surface support equipment end items to satisfy replacement requirements generated by fleet-related tactical activities. The FY 2005 request also provides for procurement of, and upgrades to, telemetry and destruct systems essential to establishing a TRIDENT II (D5) flight test capability in the Pacific.

**DD FORM 2454, JUL 88** 

P-1 SHOPPING LIST ITEM NO. PAGE NO. 111 1 **EXHIBIT P-40 BUDGET JUSTIFICATION SHEET** 

#### **ALTERATIONS**

Alterations to non-flying tactical hardware are continuing requirements for the Strategic Weapons System. Alterations (SPALTs) entail the application of available technology to eliminate personnel safety hazards, correct design deficiencies, maintain system effectiveness by resolving equipment operability problems, achieve logistic economies, and provide for shipboard subsystem D5 life extension modernization efforts. SPALT estimates include both known alterations related to resolution of specific problems as well as calculated, formula-generated alterations based on recent experience. Amounts included in this P-1 line for alterations are subdivided as follows:

	(\$0	00)	
	FY 2003	FY 2004	FY 2005
Launcher and Handling Equipment	2,650	1,700	2,800
Fire Control Equipment	13,770	12,800	26,600
Navigation Equipment	17,620	24,800	25,400
Instrumentation/Missile Checkout Equipment	12,700	8,000	2,100
Total	\$46,740	\$47,300	\$56,900

Funds are required to procure formula-generated alterations to the Strategic Weapons System launcher and fire control subsystems; to inertial, non-inertial, and Electrostatically Supported Gyro Navigator (ESGN) navigation subsystem equipment on deployed SSBNs and installed at supporting shore facilities, including the TRIDENT Training Facility (TTF), Bangor, TTF, Kings Bay, the Ashore Navigation Center, and the Inertial System Test Laboratory; to test instrumentation used on SSBNs, support ships and at the Eastern Test Range, the TRIDENT Refit Facility (TRF), Bangor, and TRF Kings Bay; and to missile handling equipment, missile test and readiness equipment, and surface support equipment. Installation of approved SPALTs is performed on a turnkey basis in conjunction with the procurement of equipment. Use of Commercial-off-the-Shelf/Non-Developmental Items (COTS/NDI) has been initiated and is being implemented in all subsystems, wherever possible.

Funding was included in FY 2002 for Fire Control alterations needed to assure a single configuration of TRIDENT II Strategic Weapon System (SWS). (The same MK-98 Mod 4, COTS/NDI-based, open-system-architecture Fire Control System scheduled for installation on the four Pacific-based TRIDENT I SSBNs being backfitted to TRIDENT II capability is being installed on the ten Atlantic-based TRIDENT II SSBNs that presently carry the MK-98 Mod 1 version.) In addition to providing for calculated Fire Control System modifications based on historical experience, funding in all years will allow for implementation of life-cycle cost control initiatives aimed at integration of TRIDENT II SWS subsystem equipment into the Fire Control system, leveraging off of the MK98 Mod 4 Fire Control design to implement the first phase of TRIDENT II SWS "Vision 2010" architecture. The product of these SWS integration efforts will be implementation of an affordable design to meet all operational requirements, while minimizing total ownership costs.

The FY 2004 and FY 2005 requests for Navigation equipment alterations will address aging and obsolescence issues by providing for procurement of an updated navigation system, employing an Interferometric Fiber Optic Gyroscope (IFOG) and capable of economically supporting the TRIDENT II SWS throughout its extended service life.

In addition to formula-generated alterations to Instrumentation/Missile Checkout equipment which are budgeted in all years, the FY 2003 through FY 2005 requests support implementation of SPALTs to the TRIDENT II M240R Data Recording System.

**DD FORM 2454, JUL 88** 

P-1 SHOPPING LIST ITEM NO. PAGE NO. 111 2 **EXHIBIT P-40 BUDGET JUSTIFICATION SHEET** 

#### TRAINING SUPPORT EQUIPMENT

This category provides for procurement of, and alterations to, both tactical and non-tactical equipment required at submarine training facilities to train personnel in the operation and maintenance of launcher and handling, fire control, navigation, missile checkout, and test instrumentation subsystems. Each training facility consists of an integrated family of system and unit laboratories that interface with a central stimulation complex to provide complete and realistic training for replacement and off-crew personnel, both officer and enlisted, as required for manning of SSBNs and shore facilities. Funding in all years is budgeted to procure training unique equipment required as the result of alterations to SWS tactical equipment. The FY 2003 through FY 2005 requests also provide for updates to Training Stimulation System COTS hardware at the TRIDENT Training Facility (TTF), Kings Bay, and at TTF, Bangor; procurement of hardware for Electronic Classrooms at both TTFs; and procurement of Launcher System Control Group (LSCG) equipment for both the West Coast and East Coast training facilities. In FY 2004 and FY 2005 additional funding is budgeted for updates to MK98 Mod 4 Fire Control System training equipment at TTF, Kings Bay.

(\$000) <u>FY 2003</u> <u>FY 2004</u> <u>FY 2005</u>

Training Support Equipment \$7,934 \$15,498 \$15,213

#### TRIDENT II (D5) BACKFIT

The Program of Record calls for a post-START II Submarine-Launched Ballistic Missile (SLBM) force of 14 TRIDENT SSGNs, all equipped with TRIDENT II (D5) missiles and based at two homeports (Kings Bay, GA, and Bangor, WA). This mandated 14-boat, all D5 force breaks down as follows:

- 10 SCN-Funded, New-Construction TRIDENT II Submarines: SSBNs 734-743, the last of which deployed in FY 1998.
- 2 OPN-Funded, TRIDENT I (C4) Equipped Submarines Being Backfitted to TRIDENT II (D5) Capability: SSBN 732, which recently completed its concurrent Engineered Overhaul (EOH) and D5 Backfit at Puget Sound Naval Shipyard (PSNS) and has deployed, and SSBN 733, which is presently undergoing its own EOH/D5 Backfit at PSNS.
- 2 SCN-Funded, TRIDENT I (C4) Equipped Submarines to be Backfitted to TRIDENT II (D5) Capability: SSBNs 730 and 731, which will commence their concurrent Engineered Refueling Overhauls (EROs) and D5 Backfits in FY 2005 and FY 2006, respectively.

Funding in this cost category is required to procure and install shipboard tactical equipment and shorebased training hardware needed to upgrade the first two designated D5 Backfit hulls (SSBNs 732 and 733) from C4 to D5 capability. (Since the second two Backfit hulls (SSBNs 730 and 731) will undergo their D5 modernization during concurrent EROs, they are therefore being financed with SCN funds beginning in FY 2002.)

TRIDENT II (D5) Backfit (\$000) FY 2003 FY 2004 FY 2005 \$5,860

**DD FORM 2454, JUL 88** 

P-1 SHOPPING LIST ITEM NO. PAGE NO. 111 3 **EXHIBIT P-40 BUDGET JUSTIFICATION SHEET** 

## **UNCLASSIFIED**

WEAPON SYSTEM	II COST A	NALYSI	3				DATE:		
EXHIBIT (P-5) PROGRA	AM COST	BREAK	OOWN				Feb	ruary 20	04
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM N		TURE/SUBH					
Other Procurement, Navy/							quipmen		
Budget Activity 4 - Ordnance Support Equipm	ent		To	tal Cost	in Tho	usands	of Dolla	ars	
WEAPON SYSTEM	ldent.	FY 02	Total	FY 03	Total	FY 04	Total	FY 05	Total
COST ELEMENTS	Code	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
Other Material Support					8,570		33,200		24,100
Alterations					46,740		47,300		56,900
Training Support Equipment					7,934		15,498		15,213
TRIDENT II (D5) Backfit					10,020		7,100		5,860
Total					73,264		103,098		102,073

P-1 SHOPPING LIST ITEM NO. PAGE NO. 4

111

**UNCLASSIFIED** 

### **UNCLASSIFIED**

		E	BUDGET ITE	M JUSTIFICA P-40	ATION SHEE	Т			DATE: FEBRU	ARY 2004	
APPROPRIATION/BUI	OGET ACTIVIT	Υ					P-1 ITEM NOM	ENCLATURE			
OTHER PROCURE	EMENT, NA	VY/BA-4	<b>Ordnance S</b>	Support Equip	pment		SSN Comba	t Control Sy	stem BLI: 54	42000 SBHD	: H4VB
Program Element for C	ode B Items:					Other Related F	Program Elemen	ts			
	Prior Years	ID Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY2009	Total
QUANTITY											
COST (In Millions)			\$38.4	\$61.7	\$69.5	\$147.5	\$148.1	\$110.3	\$122.0	\$125.4	CONT.
SPARES COST (In Millions)											

#### COMBAT SYSTEMS TECHNOLOGY REFRESH / LEGACY INTEGRATION (VB011)

Procures tactical control hardware upgrades to SSN688, SSN688I and SSBN for legacy combat control systems. These updates provide acccelerated delivery of tactical capability to the fleet and bridge the gap between legacy combat control systems and AN/BYG-1. Procures Engineering Changes (EC) and Ordnance Alterations (ORDALT) to correct fleet reported problems with legacy Combat Control System software and hardware.

#### SUBMARINE COMBAT CONTROL SYSTEM MODERNIZATION PROGRAM (VB034)

Nomenclature used in the PB04 budget submit (CCS MK2) has been changed to reflect the newly acquired AN/BYG-1 nomenclature. This nomenclature was changed in FY05 and out to incorporate the addition of Virginia Class Combat Control System to a common acquisition and development strategy. This allows for AN/BYG-1 to be the common combat control system nomenclature across all submarine platforms. The BYG-1 nomenclature, with bi-annual technolgy insertion designation (i.e. BYG-1 (Tl04)), replaces CCS Mk2 Block 1C ECP4 nomenclature.

This cost code procures hardware and software upgrades for the AN/BYG-1 system for installation on all submarine platforms. The AN/BYG-1 is the combat control system common across all submarine platforms which incorporates tactical control, weapon control and Tactical Local Area Network (TacLAN) functions into a single procurement program. AN/BYG-1 allows the submarine Navy to rapidly update the ship safety tactical picture, integrates the common tactical picture into the battlegroup, improves torpedo interfaces and provides tactical TOMAHAWK (TOMAHAWK Block IV) capability.

AN/BYG-1 systems will be continuously updated with hardware enhancements to address COTS obsolescence and capability improvements as defined by the APB process. These updates are referred to as Tech Insertion (TI) kits and are differentiated by year of development (i.e. TI00, TI04, etc). The TI upgrades provide the baseline for all future AN/BYG-1 procurements. In addition, this budget also provides tech insertion "kits" to update existing AN/BYG-1 platforms.

The TOMAHAWK Breakout Box provides electrical access to the vertical launch system. This facilitates the insertion of simulation signals for the end-to-end calibration, testing and training. The Tactical Weapons Simulator Upgrade expands the capability of the hardware to allow test of all weapon launchers at the same time. The procurement and installation of these two items are shown separately in FY02-FY04 and become integrated into the AN/BYG-1 baseline FY05 and out. These additions, coupled with the addition of TacLAN hardware, account for procurement unit price fluctuations between FY04 (CCS Mk2) and FY05 (AN/BYG-1).

P-1 SHOPPING LIST

DD Form 2454, JUN 86 ITEM NO. 112 PAGE NO. 1

## CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET	DATE:
P-40 CONTINUATION	FEBRUARY 2004
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE
OTHER PROCUREMENT, NAVY/BA-4 Ordnance Support Equipment	SSN Combat Control System BLI: 542000 SBHD: H4VB

## PRODUCTION / ENGINEERING SUPPORT (VB500)

This is a new cost code beginning in FY05 combining production support and logistics support cost codes into one common support code.

## PRODUCTION SUPPORT (VB033)

This account procures technical data, mock-ups, demonstrations and testing products directly for the SSN Combat System Obsolete Equipment Replacement (OER) program. Also procured are services required to support production engineering, quality assurance, product improvement and acceptance testing for production line items. Technical on-site support at shipyards and depots for hardware related problems is also included.

#### LOGISTIC SUPPORT REQUIREMENTS (VB983)

This account procures integrated logistics products directly for the SSN Combat System Obsolete Equipment Replacement (OER) program. Also procured are logistics engineering services which perform essential documentation updates related to major hardware revisions.

## **INITIAL TRAINING (VB995)**

This provides initial training curriculum development, training management materials, exercise control group development, pilot services to the Fleet.

## CONSULTING SERVICES (VB900)

This account provides assistance for asset management, cost analyses, preparation of contract specifications, monitoring of contract deliverables, prime contractor cost, schedule and performance monitoring, ILS planning and GFI coordination.

## **EQUIPMENT INSTALLATION (VB5NS)**

Funds are for the installation of Combat Control System equipments included in the Fleet Modernization Program.

## NON-FMP INSTALLATION (VB6NS)

Funds are for the installation of Combat Control System equipments not included in the Fleet Modernization Program.

## OTHER INFORMATION

Developmental efforts are funded by Program Element 64562N within the SSN Combat Control System Improvement Program F0236.

P-1 SHOPPING LIST

ITEM NO. 112 PAGE NO. 2

CLASSIFICATION:

**UNCLASSIFIED** 

DD Form 2454, JUN 86

## **UNCLASSIFIED**

WEAPON P-5	S SYSTEM COST ANALYSIS					Weapon Sy	stem							FEBRUARY	2004
	RIATION/BUDGET ACTIVITY					ID Code	P-1 ITEM NO	OMENCLATUR	E/SUBHEAD						
Other P	rocurement, Navy														
BA-4 Or	dnance Support Equipment	,					SSN COM	BAT CONT	ROL SYST	EM BLI:	542000 SBI	HD: H4VB			
			TOTAL COS	T IN THOUS	ANDS OF DOL	LARS									
COST	ELEMENT OF COST	ID	Prior		FY2	2002		FY 2003			FY2004			FY2005	
CODE		Code	Years Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
				, ,			, ,						,		
	N77 SUBMARINES														
	Combat System Tech Refresh / Legacy														
VB011	Integration	Α							24,752			1,869			14,164
	ECP/Auxiliary Equipment / Integration								695			125			250
	AN/BYG-1 EDMs								9,100			0			0
	Legacy Integration								0			324	1	200	200
	AN/BSG-1 Weapon Launching System						13	453	5,890						
	TIDS Tech Refresh *								9,067			1,420			13,714
VB034	Submarine Combat Control System  Modernization Program								15,139			29,554			69,722
	CCS MK2 Block 1C Baseline Upgrade Kits	В													
	CCS MK2 Block 1C ECP4 Upgrade Kits	В					5	2,448	12,240	7	2,596	18,174	0	0	0
	MultiiTube Weapon Simulator (MTWS)	Α					0	0	0	20	420	8,397	0	0	0
	TMHWK Break Box	A					7	414	2,899	7	426	2,983	0	-	0
	AN/BYG-1 Systems	В					•		_,,,,,	-		_,,,,,	12	-	52,452
	SSN688 Class	-											4	4,205	16,820
	SSBN Class												2	3,617	7,234
	SSGN Class												2	3,884	7,768
	SSN21 Class												2	7,532	15,064
	SSN774 Class												2	2,783	5,566
	Technology Insertion (TI00/TI02 Baseline)												5		17,270
	SSN688 Class												5	3,454	17,270
	56,1656 6,445												Ĭ	0, 10 1	,2.0
VB500	PRODUCTION/ENGINEERING SUPPORT														7,462
															.,
									4.045			4 470			0
VB033	PRODUCTION SUPPORT								1,915			1,478			0
												204			040
VB900	CONSULTING SERVICES								1,194			601			616
									0.040			450			0
VB983	LOGISTICS SUPPORT								2,042			450			0
									4.000			4 000			4.000
VB995	INITIAL TRAINING								1,230			1,329			1,362
	PROCUREMENT TOTAL								46,272			35,281			93,326
VB5NS	EQUIP INSTALLATION (FMP)								11,084			26,941			45,435
l															
VB6NS	NON-FMP EQUIP INSTALLATION								4,296			7,291			8,720
		1		l .= : =	l	I	I . I		l :	l 	l .				
	* FY05 Funds non-recurring engineering cost ass		-	of Tech Refi	resh to TIDS Pl	nase I/II systen	ns currently in	stalled on SSN	1688 and SSG	N Class subi	marines.				
	This Tech Refresh establishes the TacLAN base	eline for A	N/BYG-1.												
		1				_	<del>                                     </del>		64.050			60 510			447.404
DD FORM	2446, JUN 86			ı	j	0		PPING LIS	61,652 T			69,513	CLASSIFI	CATION	147,481

## **UNCLASSIFIED CLASSIFICATION:**

<b>BUDGET PROCUREM</b>	ENT HISTO	ORY AND F	PLANNING EXHIBIT	Г (Р-5А)		Weapon System		A. DATE		
								F	EBRUARY 2	2004
B. APPROPRIATION/BUDGET					C. P-1 ITEM NON	IENCLATURE			SUBHEAD	
Other Procurement, Na										
BA-4 Ordnance Suppo	rt Equipm	ent			SSN Comba	Control System BLI: 5	42000	D. T. C. C.	H4VB	5.75
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
CCS MK2 OER										
FISCAL YEAR 03 BLOCK 1C ECP4 UPGRADE	5	\$2,448	NAVSEA		C/FP	LOCKHEED MARTIN,	12/02	12/03	YES	
UPGRADES (FY03)	7	\$414	NUWC NEWPORT		N/A	NE&SS	01/03	07/03	YES	
BREAKOUT BOX FISCAL YEAR 04	'	<b>\$414</b>	NUWC NEWPORT		IN/A	NUWC NEWPORT	01/03	07/03	YES	
BLOCK 1C ECP4 UPGRADE UPGRADES (FY04)	7	\$2,596	NAVSEA		C/FP	LOCKHEED MARTIN, NE&SS	12/03	12/04	YES	
BREAKOUT BOX	7	\$426	NUWC NEWPORT		N/A	NUWC NEWPORT	01/04	07/04	YES	
MTWS	20	\$420	NAVSEA		SS/FP	PROGENY	12/03	07/04	YES	
FISCAL YEAR 05										
AN/BYG-1	12	\$4,371	NAVSEA		C/Various	Various	12/04	12/05	YES	
D. REMARKS										

FY04 CCS MK2 Block 1C ECP4 unit costs increase due to the addition of 16 Tube Weapon Simulator (STWS).
FY04 and out ECP4 equipment cost increase due to addition of 16 tube simulator into ECP4 configuration. Additional 20 STWS units required in FY04 to backfit prior year procurements.

FY05 AN/BYG-1 Hardware will be procured from multiple competitively awarded contracts.

FY05 AN/BYG-1 Hardware costs increased due to inclusion of TacLAN equipment previously procured under a different budget line.

P-1 SHOPPING LIST Classification: DD Form 2446-1, JUL 87

> PAGE NO. 4 ITEM NO. 112

**UNCLASSIFIED** 

CLASSIFICATION: UNCLASSIFIED

MODELS OF SYSTEM AFFECTED: CCS to Mk2 Block 1C ECP4 (SSN688) TYPE MODIFICATION: **UPGRADE** MODIFICATION TITLE: SSN COMBAT CONTROL SYSTEMS

## DESCRIPTION/JUSTIFICATION:

Through introduction of common COTS hardware, upgrade all SSN Combat Control Systems to a common baseline which includes TACTOM capability. FY04 and out equipment cost increase due to addition of 16 tube simulator into ECP4 configuration. Additional 20 STWS units required in FY04 to backfit prior year procurements.

DEVELOPMENT STATUS/MAJOR DEVELO	PMEN	T MILESTO	ONES:	TEC	HEVAL/C	PEVA	AL 02/03;	RELEA	ASE TO	FLEET	(RTF) 0	9/03									
	FY 20	02 & Prior		F	Y 2003	F	Y 2004	FY	2005	F١	2006	F١	2007	F۱	Y 2008	F	Y 2009		<u>TC</u>	то	TAL
	QTY	\$		QTY	\$		\$	QTY	\$	QTY	\$	QTY	\$		\$		\$	QTY		QTY	\$
FINANCIAL PLAN (IN MILLIONS)																					
RDT&E																				0	0.0
<u>PROCUREMENT</u>																				0	0.0
INSTALLATION KITS																				0	0.0
INSTALLATION KITS - UNIT COST																				0	0.0
INSTALLATION KITS NONRECURRING																				0	0.0
EQUIPMENT	12	19.9		5	12.2	5	12.3	0	0.0											22	44.4
EQUIPMENT NONRECURRING (MTWS)						20	8.4	0	0.0											20	8.4
ENGINEERING CHANGE ORDERS																				0	0.0
TRAINING/SUPPORT EQUIPMENT	2	3.5		0	0.0															2	3.5
OTHER																				0	0.0
INTERIM CONTRACTOR SUPPORT																				0	0.0
OTHER (DSA)		1.6			0.9		0.4		1.8											0	4.7
OTHER (Legacy Integration DSA)							0.3		0.0											0	0.3
OTHER (Non-FMP Installation)	4	2.4		5	4.3	9	7.3	4	2.2											22	16.2
OTHER (MTWS/Legacy Int Non-FMP Inst	allation	n)						20	4.3	0	0.0	0	0.0	0	0.0	0	0.0			20	4.3
INSTALL COST	4	6.0		5	7.4	9	22.8	4	9.6											22	45.8
OTHER INSTALL (MTWS / Legacy Integra	tion)					10	0.9	35	6.2	15	5.2	0	0.0	0	0.0					60	12.3
TOTAL PROCUREMENT	14	23.4		5	12.2	25	20.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	44	56.3
						ITEN	И NO. 112	-	P	AGE	5							CLAS	SSIFICATION	ON: UNCL	ASSIFIED

MODELS OF SYSTEMS	S AFF	ECTED:	,	CCS to	Mk2 E	Block 1C E	CP4 (S	SSN688)				MOE	DIFICAT	ΓΙΟΝ	TITL	E: SSN C	OMB	AT CONTE	ROL S	YSTEMS				
INSTALLATION INFOR	NTA	TION:	AIT	-																				
ADMINISTRATIVE LEA						PRODUC	CTION	LEADTIM	E:	12		Mon												
CONTRACT DATES:		<b>/</b> 2002:		c-01	_	FY 2003:			_				Dec-03					2005: <u>N/A</u>						
DELIVERY DATE:	FΥ	/ 2002:	De	c-02		FY 2003:	Dec	-03	_	I	FY 20	04:	Dec-04	1			FY:	2005: N/A						
										(\$ in	Millio													
Cost:	Р	rior Year			F	Y 2003	F	Y 2004	F	Y 2005			Y 2006			Y 2007		Y 2008		Y 2009		Complete		Total
	Qt	y \$			Qty	\$	Qty	\$	Qty	\$		Qty	\$	(	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	4	6.0			2	3.0																	6	9
FY 2002 EQUIPMENT					3	4.4																	3	4
FY 2003 EQUIPMENT							9	22.8															9	22
FY 2004 EQUIPMENT									4	9.0	6												4	9
FY 2005 EQUIPMENT												0	0.0										0	0
FY 2006 EQUIPMENT															0	0.0							0	0
FY 2007 EQUIPMENT																	0	0.0					0	0
FY 2008 EQUIPMENT																			0	0.0			0	0
FY 2009 EQUIPMENT																					0	0.0	0	0
TO COMPLETE																							0	0
INSTALLATION SCH	EDU	ILE:																						
FY 2002		FY	2003		FY	2004		FY 2005			FY 20	006			FY 2	2007		FY 2008		FY	2009		<u>TC</u>	
& Prior			3	4 1	2	3 4	1	2 3	4	1	2	3	4	1	2	3 4	1	2 3	4	1 2		4		TOTAL
In 4		0 3	2	0 2	3	2 2	1	1 1	1	0	0	0	0	0	0	0 0	0	0 0	0	0 0	0	0	0	22
Out 4		0 2	1	2 2	2	3 2	0	1 2	1	0	0	0	0	0	0	0 0	0	0 0	0	0 0	0	0	0	22
						175	ANG	440	DAG	)F 0								01.4	OOIE	P-3		A 00151		
						HE	M NO.	112	PAC	GE 6								CLA	221FI	CATION:	UNCL	.ASSIFI	בט	

INDIVIDUAL MODIFICATION (Continued)

CLASSIFICATION: **UNCLASSIFIED**P3A (Continued)

CLASSIFICATION:	UNCLASSIFIED
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P3A	INDIVIDUAL MODIFICATION				
MODELS OF SYSTEM AFFECTED:	CCS to Mk2 Block 1C ECP4 (SSBN)	TYPE MODIFICATION:	UPGRADE	MODIFICATION TITLE:	SSN COMBAT CONTROL SYSTEMS
DESCRIPTION/JUSTIFICATION:					
Through introduction of common COTS ha	ardware, upgrade all SSN Combat Cor	ntrol Systems to a common b	aseline.		

DEVELOPMENT STATUS/MAJOR DEVELO	PMEN	T MILESTO	NES:	TEC	HEVAL/	OPEV	AL 02/03	; RELI	EASE TO	FLEE	ET (RTF	) 09/03	3			_					
	FY 20 QTY	002 & Prior \$		<u>FY</u> QTY	<u>2003</u>		<u>/ 2004</u> \$		<u>2005</u>	<u>FY</u> QTY	2006 \$	<u>FY</u> QTY	<u>′ 2007</u> \$		<u>′ 2008</u> \$	<u>FY</u> QTY	<u>′ 2009</u> \$	QTY	<u>TC</u> \$	<u>TO</u> QTY	TAL \$
FINANCIAL PLAN (IN MILLIONS)		·			*				•		<u> </u>		· ·		*		Ť		,	3	
<u>RDT&amp;E</u>																				0	0.0
<u>PROCUREMENT</u>																				0	0.0
INSTALLATION KITS																				0	0.0
INSTALLATION KITS - UNIT COST																				0	0.0
INSTALLATION KITS NONRECURRING																				0	0.0
EQUIPMENT						1	3.0													1	3.0
EQUIPMENT NONRECURRING																				0	0.0
ENGINEERING CHANGE ORDERS																				0	0.0
DATA																				0	0.0
TRAINING EQUIPMENT																				0	0.0
SUPPORT EQUIPMENT																				0	0.0
OTHER																				0	0.0
INTERIM CONTRACTOR SUPPORT																				0	0.0
OTHER (DSA)							0.1		0.0											0	0.1
OTHER (Non-FMP Installation)								3	1.3											3	1.3
INSTALL COST						0	0.0	3	14.4											3	14.4
TOTAL PROCUREMENT	0	0.0		 0	0.0	1	3.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	3.0

ITEM NO. 112

PAGE 7

CLASSIFICATION: UNCLASSIFIED

MODELS OF	SYSTEMS	AFF	ECTED:	:	СС	S to M	/lk2 B	Block 1C	ECF	94 (S	SBN)					MOI	DIFIC	CATIO	N TIT	LE: <u> </u>	SSN C	OMB	AT C	ONTR	OL S	YSTE	MS				
INSTALLATION OF ADMINISTRA	IMPLEME	NTAT MITC	ΓΙΟΝ: Ε:	_Al			<u>-</u>	_		-	LEADTI	ME:		12		Mon			_												
CONTRACT			2002:	N/.			_	FY 200								004:				-			2005:								
DELIVERY D	ATE:	FΥ	2002:	N/	A		_	FY 200	)3: _	N/A					FY 20	004:	Dec	:-04		-		FY 2	2005:	N/A							
														(\$ ir	n Millio	ons)															
Cos	st:		or Years	3			<del></del>	Y 2003			Y 2004		FY	200			Y 20			FY 20			Y 200			Y 200			omplete		Total
		Qty	\$				Qty	\$	(	Qty	\$	Q	Qty	\$		Qty		\$	Qty		\$	Qty	:	\$	Qty	,	\$	Qty	\$	Qty	\$
PRIOR YEA	.RS	0	0.0																											0	0.0
FY 2002 EQ	UIPMENT						0	0.0																						0	0.0
FY 2003 EQ	UIPMENT									0	0.0																			0	0.0
FY 2004 EQ	UIPMENT												3	14	.4															3	14.4
FY 2005 EQ	UIPMENT															0	(	0.0												0	0.0
FY 2006 EQ	UIPMENT																		0	(	0.0									0	0.0
FY 2007 EQ	UIPMENT																					0	(	0.0						0	0.0
FY 2008 EQ	UIPMENT																								0	C	0.0			0	0.0
FY 2009 EQ	UIPMENT																											0	0.0	0	0.0
TO COMPLI	ETE																													0	0.0
INSTALLA	TION SCH	EDUI	LE:	•						•		•			•				1	•											
	FY 2002		FY	2003	3		FY 2	2004	$\Box$		FY 200	) <u>5</u>			FY 2	2006			FY	2007			FY	2008			FY 2	2009		TC	
	& Prior		1 2	3	4	1	2	3 4	4	1_	2 3	3 -	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		TOTAL
In	0		0 0	-	-	0	0	_	0	3	0 (			0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	3
Out	0		0 0	0	0	0	0	0 (	0	2	1 (	) (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
																											P-30				

PAGE 8

CLASSIFICATION: UNCLASSIFIED

INDIVIDUAL MODIFICATION (Continued)

ITEM NO. 112

CLASSIFICATION: **UNCLASSIFIED**P3A (Continued)

CLASSIFICATION: UNCLASSIF	TED									
P3A	INDIVIDUAL MODIFIC	CATION								
MODELS OF SYSTEM AFFECTED	BREAKOUT BOX	TYPE M	ODIFICATION:	UPGRAI	DE	MODIFIC	CATION TITLE:	SSN CON	MBAT CONTRO	L SYSTEMS
DESCRIPTION/JUSTIFICATION:										
	rovides electrical access to the vertical					nals for end-to-	end calibration	and test.		
Note: 4 units procured in FY00 us	ing funds from a different BLI. The 4	snipsets are install	ed under this BL	i for a total q	uantity of 19.					
DEVELOPMENT STATUS/MAJOR	DEVELOPMENT MILESTONES:									
	FY 2002 & Prior	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC:	ΤΟΤΔΙ

	FY 2	002 & Prior			FY	2003	F	2004	<u>F</u>	2005	<u>F)</u>	2006	<u>F</u>	2007	FY	2008	FY	2009		TC	<u>TO</u>	TAL
		\$			QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	<u>TC</u> \$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
<u>PROCUREMENT</u>																					0	0.0
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																					0	0.0
INSTALLATION KITS NONRECURRING																					0	0.0
EQUIPMENT	1	0.4			7	2.9	7	3.0	0	0.0											15	6.3
EQUIPMENT NONRECURRING																					0	0.0
ENGINEERING CHANGE ORDERS																					0	0.0
DATA																					0	0.0
TRAINING EQUIPMENT																					0	0.0
SUPPORT EQUIPMENT																					0	0.0
OTHER																					0	0.0
INTERIM CONTRACTOR SUPPORT																					0	0.0
OTHER (DSA)		1.6				0.5		0.3		0.0											0	2.4
OTHER (Non-FMP Installation)																					0	0.0
INSTALL COST	5	1.5			7	2.3	7	2.2	0	0.0											19	6.0
TOTAL PROCUREMENT	1	0.4	0	0.0	7	2.9	7	3.0	0	0.0	0	0.0	0	0.0						\$0.0	15	6.3

ITEM NO 112

PAGE 9

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNC	CLAS	SIFIED																							
P3A (Continued)			IN	NDIVID	JAL N	ODIFICAT	ΓΙΟΝ (	Continue	d)																
MODELS OF SYSTEMS	AFF	ECTED:	<u> </u>	BREAK	OUT E	30X						MOI	DIFIC	OITA	N TITI	LE: SSN	COM	IBAT CON	ITROL	SYST	EMS				
INSTALLATION INFORM METHOD OF IMPLEMENT ADMINISTRATIVE LEAD CONTRACT DATES: DELIVERY DATE:	NTAT NTIM FY	ΓΙΟΝ:	AIT  Jan-0  Jul-0		_ _ _ _	PRODUC FY 2003: FY 2003:	Jan		E:		6 FY20 FY20		iths Jan- Jul-0		- -	FY2004: FY2004:	Jan Jul-				FY 20 FY 20		N/A N/A		
											in Mill						_							ı	
Cost:	Prio Qtv	r Years			Qtv	Y 2003 \$	Qty	Y 2004 \$	Qty	FY 200	)5 \$	Qty	Y 200	06 \$	Qtv	Y 2007 \$	Qty	Y 2008	Qty	FY 200		To Co	omplete \$	Qtv	Total \$
	Qly	Ð			Qty	φ	Qty	Ψ	Qty	4	Ф	Qty	•	φ	Qty	Ψ	Qty	φ	Qty	4	p	Qty	φ	Qty	φ
PRIOR YEARS	5	1.5																						5	1.5
FY 2002 EQUIPMENT																								0	0.0
FY 2003 EQUIPMENT					7	2.3																		7	2.3
FY 2004 EQUIPMENT							7	2.2																7	2.2
FY 2005 EQUIPMENT									0	0	0.0													0	0.0
FY 2006 EQUIPMENT												0	C	0.0										0	0.0
FY 2007 EQUIPMENT															0	0.0								0	0.0
FY 2008 EQUIPMENT																	0	0.0						0	0.0
FY 2009 EQUIPMENT																			C	0	.0			0	0.0
TO COMPLETE																								0	0.0
INSTALLATION SCHI	EDUI	LE:																							
FY 2001		FY	2003		FY	2004		FY 2005			FY 2	2006			FY 2	2007		FY 200	<u>8</u>		FY 2	2009		<u>TC</u>	
& Prior		-		4 1	2	3 4	1	2 3	4		2	3	4	1	2	3 4	1	2 3		1	2	3	4		TOTAL
`In 5 Out 5		1 2		2   2 2   2	1 2	2 2 2 1	0	0 0	0	0	0	0	0	0	0	0 0	0	0 0	-		0	0	0	0	19 19
	J	<u>'                                    </u>					. L <u>~</u>		<u> </u>	. L <u>~</u>			Ŭ			<u> </u>	ے ر	- 0		الٽ			<u> </u>	ٽ	10

P-3A CLASSIFICATION: **UNCLASSIFIED** 

CLASSIFICATION:	UNCLASSIFIED					
P3A		INDIVIDUAL MODIFICATION	N			
MODELS OF SYSTE	M AFFECTED:	AN/BYG-1 (SSN688)	TYPE MODIFICATION:	UPGRADE	MODIFICATION TITLE:	SSN COMBAT CONTROL SYSTEMS
DESCRIPTION/JUST	TIFICATION:					
This program will pron an annual basis.		at control systems with COTS-based	I upgrades to combat control a	and tactical control hardware a	and software. Milestone Decis	ion Authority (MDA) Production Reviews are held

DEVELOPMENT STATUS/MAJOR DEVELO	NES:	<u>D</u>	evelopr	nent (	Comp	oleted 9	/04; C	T/FOT&I	E 8/05-	-2/06												
	FY 20	002 & Prior			FY 200	3	FY	2004	FY	2005	FY	2006	FΥ	2007	FY	2008	FY	<u> 2009</u>		тс	то	TAL
	QTY	\$		C	TY :	5 (		\$	QTY	\$	QTY		QTY	\$	QTY	\$	QTY	\$	QTY	<u>TC</u> \$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																						
<u>RDT&amp;E</u>																					0	0.0
<u>PROCUREMENT</u>																					0	0.0
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																					0	0.0
INSTALLATION KITS NONRECURRING																					0	0.0
EQUIPMENT									4	16.8	1	4.3	4	17.5	7	30.5	3	12.6	0	0.0	19	81.7
OTHER EQUIPMENT (Legacy Integration)									1	0.2	0	0.0	0	0.0	0	0.0	0	0.0			1	0.2
ENGINEERING CHANGE ORDERS																					0	0.0
DATA																					0	0.0
TRAINING EQUIPMENT																					0	0.0
SUPPORT EQUIPMENT																					0	0.0
OTHER (TIDS Tech Refresh / ECP/Aux Ed	quip)									14.0		3.6		0.0		0.0		0.0			0	17.6
INTERIM CONTRACTOR SUPPORT																					0	0.0
OTHER (DSA)										0.0		1.4		1.4		2.3		4.7		1.6	0	11.4
OTHER (NON-FMP INSTALL)									0	0.0	4	4.0	1	0.9	4	3.6	7	5.8	3	2.5	19	16.8
OTHER (Other NON-FMP INSTALL)										0.0		0.1		0.4		0.6		0.8			0	1.9
INSTALL COST									0	0.0	4	22.0	1	5.0	4	21.3	7	34.3	3	12.9	19	95.5
OTHER INSTALL COST									0	2.6	1	0.3	0	0.0	1	0.4	0	0.0	0	0.0	2	3.3
TOTAL PROCUREMENT							0	\$0.0	5	\$31.0	1	\$7.9	4	\$17.5	7	\$30.5	3	\$12.6	0	\$0.0	20	99.5

ITEM NO. 112

PAGE 11

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UN	ICLAS	SIFIED																					
P3A (Continued)			IN	DIVIDU	AL N	ODIFICA	TION	(Continu	ued)														
MODELS OF SYSTEM	S AFF	ECTED:	. <u>A</u>	N/BYG-	-1 (S	SN688)					МС	DIFICA	AOITA	I TITI	LE: SSN	COM	BAT CO	NTROL	SYSTEMS	3			
INSTALLATION INFORMETHOD OF IMPLEM ADMINISTRATIVE LEA	ENTA	TION:			_	PRODU	CTIO	N LEADT	IME:		12 Mo												
CONTRACT DATES: DELIVERY DATE:			N/A N/A		_	FY 2003		N/A N/A					FY 20 FY 20		N/A N/A					Dec-04 Dec-05			
DELIVERY DATE:	FΥ	2002:	N/A		_	FY 2003	s:	N/A					FY 20	JU4:	N/A			_ FY2	200 <u>5: I</u>	Jec-05			
											n Million												
Cost:	Pric Qty	r Years	1		Qty	Y 2003 \$	Qty	FY 2004 \$	Qty	FY 2005 \$	Qty	FY 200 \$		P Qty	Y 2007 \$	Qty	Y 2008	Qty	FY 2009 \$	To C	omplete \$	Qty	Total \$
	Qly	Þ			Qly	Ф	Qiy	Φ	Qly	φ	Qly	Ф	)	Qly	Ψ	Qly	Φ	Qiy	Φ	Qiy	Ф	Qiy	Φ
PRIOR YEARS																						0	0.0
FY 2002 EQUIPMENT	Γ																					0	0.0
FY 2003 EQUIPMENT	Γ						(	0.0														0	0.0
FY 2004 EQUIPMENT	Γ								(	0.0												0	0.0
FY 2005 EQUIPMENT	Г										4	22	2.0									4	22.0
FY 2006 EQUIPMENT	Г													1	5.0							1	5.0
FY 2007 EQUIPMENT	Г															4	21.3					4	21.3
FY 2008 EQUIPMENT	Г																	7	34.3			7	34.3
FY 2009 EQUIPMENT	Г																			3	12.9	3	12.9
TO COMPLETE																						0	0.0
INSTALLATION SC	<u>H</u> EDU	L <u>E:</u>																					
FY 2002		FY :	2003		FY:	<u> 2004</u>		FY 20	<u>05</u>	<u>F</u>	Y 2006			FY 2	<u> 2007</u>		FY 200	<u>8</u>	<u> </u>	Y 2009		<u>TC</u>	
& Prior			3 4	<del></del>	2	3 4			3 4		2 3	4	1	2	3 4	1	2 3	4	·	2 3	4		TOTAL
) In 0		0 0			0	0 0	0		0 0		1 1	1	1	0	0 0		1 1	1		2 2	2	3	19
Out 0		0 0	0 0	0	0	0 0	0	0	0 0	1	1 1	1	1	0	0 0	1	1 1	1	1	2 2	2	3	19

РЗА		INDIVIDU	AL MO	DIFICAT	ΓΙΟΝ																	
MODELS OF SYSTEM AFFECTED:	AN/B	YG-1 (SSB	N)		_	TYPE N	/ODIF	ICATIO	N:	UPGRA	DE		_	MODIFI	CATIC	N TITLE	≣:	SSN C	OMBA	T CONTRO	L SYSTEMS	S
DESCRIPTION/JUSTIFICATION:																						
This program will provide submarine comb held on an annual basis.	at cont	rol systems	s with C	OTS ba	sed up	ogrades	to cor	nbat cor	itrol and	tactical	contro	l hardwa	re and	l software	e. Mile	estone D	ecisio	n Autho	rity (M	IDA) Produc	tion Review	rs are
DEVELOPMENT STATUS/MAJOR DEVELO	OPMEN	NT MILEST	ONES	:	Deve	lopmen	t Con	pleted	9/04; D	T/FOT&	E 8/05-	2/06					_					
	FY 2 QTY	2002 & Prio \$	<u>r</u>		<u>FY</u> QTY	<u>2003</u>	<u>F`</u> QTY	<u>/ 2004</u> \$	<u>FY</u> QTY	<u>2005</u>	<u>FY</u> QTY	<u>2006</u>	<u>F`</u> QTY	<u>/ 2007</u> \$	<u>FY</u> QTY	<u>′ 2008</u> \$	<u>F)</u> QTY	<u>/ 2009</u> \$	QTY	<u>TC</u> \$	<u>TO</u> QTY	TAL \$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
<u>PROCUREMENT</u>																					0	0.0
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																					0	0.0
INSTALLATION KITS NONRECURRING																					0	0.0
EQUIPMENT									2	7.2	2	7.4	2	7.5	2	7.7	2	7.8	0	0.0	10	37.6
OTHER EQUIPMENT																					0	0.0
ENGINEERING CHANGE ORDERS																					0	0.0
DATA																					0	0.0
TRAINING EQUIPMENT																					0	0.0
SUPPORT EQUIPMENT																					0	0.0
OTHER																					0	0.0
INTERIM CONTRACTOR SUPPORT																					0	0.0
OTHER (DSA)									0	0.0	0	1.0	0	1.2	0	1.3	0	1.2	0	1.1	0	5.7
OTHER (NON-FMP INSTALL)									0	0.0	2	1.5	2	1.6	2	1.6	2	1.6			8	6.3
INSTALL COST									0	0.0	2	10.5	2	11.9	2	12.5	2	11.5	2	10.8	10	57.2

OTHER INSTALL COST

TOTAL PROCUREMENT

\$7.2

2 \$7.7

\$7.8

\$7.5

0

0.0

CLASSIFICATION: UI	ICLA:	SSIFIED																								
P3A (Continued)				INDI	VIDU	AL IV	ODIFICA	TION	(Con	tinued	i)															
MODELS OF SYSTEM	IS AFI	FECTED	):	AN/E	BYG-	1 (S	SBN)							MOI	DIFICA	MOIT	N TITL	LE: SSN	COM	BAT CON	TROL	SYSTEM	IS			
INSTALLATION INFOI METHOD OF IMPLEM ADMINISTRATIVE LE	ENTA	TION:				-	PRODU	CTIOI	N LEA	ADTIME	E:		12	Mon	iths											
CONTRACT DATES:		/ 200 <del>2</del> :	N/A			-	FY 2003		N/A							-Y 20		N/A				200 <u>5:</u>	Dec-0			
DELIVERY DATE:	F١	/ 2002:	N/A	Α		_	FY 2003	3:	N/A						ı	FY 20	004:	N/A			_ FY2	200 <u>5:</u>	Dec-0	)5		
												(	(\$ in N	1illion:	s)											
Cost:	_	or Years		Y 200			Y 2003		FY 20			FY 200			Y 2006			Y 2007		Y 2008		FY 2009		Complete		Total
	Qty	\$	Qty	9	\$	Qty	\$	Qty		\$	Qty	\$	5	Qty	\$		Qty	\$	Qty	\$	Qty	\$	Q	ty \$	Qty	\$
PRIOR YEARS																									0	0.
FY 2002 EQUIPMEN	Γ																								0	0.0
FY 2003 EQUIPMEN	Г							(	)	0.0															C	0.0
FY 2004 EQUIPMEN	Г										0	0	0.0												C	0.0
FY 2005 EQUIPMEN	Г													2	10.	5									2	10.
FY 2006 EQUIPMEN	Г																2	11.9							2	11.9
FY 2007 EQUIPMEN	Г																		2	12.5					2	12.
FY 2008 EQUIPMEN	Г																				2	11.5			2	11.
FY 2009 EQUIPMEN	Г																							2 10.8	2	10.8
TO COMPLETE																									0	0.0
INSTALLATION SC	HEDU	JLE:																								
FY 2002	:		2003	- 11		FY:	2004		FY	2005			FY 2	006			FY 2	2007		FY 2008	<u> 8</u>		FY 200	09	TC	
& Prior			3		1	2	3 4		2	3	4	1	2	_3_	4	1	2	3 4	1	2 3	4	1	2			TOTAL
` In 0			0	· 11	0	0	0 0			0	0	0	2	0	0	0	2	0 0	0	2 0	0	0		0 0	2	10
Out 0		0 0	0	0	0	0	0 0	0	0	0	0	0	2	0	0	0	2	0 0	0	2 0	0	0	2	0 0	2	10
							ITEM NO	<u>∩ 11′</u>	)			14								CL	/ QQIE	ΙΟΔΤΙΟΝΙ-	P-3A	LASSIFIED		
							II LIVI IV	U. 112	-			14								CL	100IF	IOA HON.	CINC	LAJJIFIEL	,	

CLASSIFICATION: UNCLASSIFIED P3A	INDIVIDUAL MODIFI	CATION					
MODELS OF SYSTEM AFFECTED:	AN/BYG-1 (SSGN)	TYPE MODIFICATION:	UPGRADE	MODIFICATION TITLE	: SSN COM	BAT CONTR	OL SYSTEMS
DESCRIPTION/JUSTIFICATION:  This program will provide submarine or on an annual basis.	ombat control systems with COTS	S based upgrades to combat control	and tactical control hard	ware and software. Milestone D	ecision Authority	(MDA) Produ	ıction Reviews are hel
DEVELOPMENT STATUS/MAJOR DEV	/ELOPMENT MILESTONES:	Development Completed 9/04	4; DT/FOT&E 8/05-2/06		-		
	FY 2002 & Prior QTY \$	<u>FY 2003</u> <u>FY 2004</u> QTY \$ QTY \$ C	FY 2005 FY 2006	6 FY 2007 FY 2008 QTY \$ QTY \$	<u>FY 2009</u> QTY \$ Q	<u>ТС</u> ГУ \$	TOTAL QTY \$

	FY 2	002 & Prior		2003		2004		2005		2006		2007	FY	2008	FY	2009		<u>TC</u> \$	<u>TO</u>	TAL
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
<u>PROCUREMENT</u>																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS - UNIT COST																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT							2	7.8	2	7.9	0	0.0	0	0.0	0	0.0	0	0.0	4	15.7
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER																			0	0.0
INTERIM CONTRACTOR SUPPORT																			0	0.0
OTHER (DSA)							0	0.0	0	1.0	0	1.2	0	0.0	0	0.0		0.0	0	2.2
OTHER (NON-FMP INSTALL)							0	0.0	2	1.5	2	1.6	0	0.0	0	0.0			4	3.1
INSTALL COST							0	0.0	2	10.0	2	11.3	0	0.0	0	0.0	0	0.0	4	21.3
OTHER INSTALL COST																			0	0.0
TOTAL PROCUREMENT					0	\$0.0	2	\$7.8	2	\$7.9	0	\$0.0	0	\$0.0	0	\$0.0	0	\$0.0	4	15.7
					ΙΤΙ	EM NO	. 112		PAGE	15							CLAS	SSIFICATIO	N: UNCLA	SSIFIED

CLASSIFICATION: UN	CLAS	SIFIED	)																							
P3A (Continued)				INDI	VIDU	AL N	ODIFIC	OITA	N ((	Continued	i)															
MODELS OF SYSTEMS	S AFF	ECTE	D:	AN/	BYG-	-1 (S	SGN)						M	ODIFI	CATIO	N TIT	LE: SSN	N COM	IBAT C	ONTRO	DL S	SYSTEMS				
INSTALLATION INFOR METHOD OF IMPLEME ADMINISTRATIVE LEA	ENTA	TION:				<del>-</del>	BBOD!	ICTIC	NNI I	LEADTIMI	Ξ.	,	12 Mc	ntho												
CONTRACT DATES:		2002:	N/	A		_	FY 200			LEADTIIVII N/A	Ξ.		IZ IVIC	JIIII IS	FY 2	2004:	N/A			F	Y20	05: D	ec 04			
DELIVERY DATE:		2002:	N/			- _	FY 200			N/A						2004:	N/A				Y20		ec 05			
												(¢ ir	n Millio	ne)												
Cost:	Prio	r Years	3	FY 20	002	F	Y 2003		FY	/ 2004		FY 2005		FY 2	006	F	Y 2007	F	Y 2008	3	F`	Y 2009	To C	omplete	-	otal
	Qty	\$	Qty	/	\$	Qty	\$	Qt	у	\$	Qty	\$	Qty	/	\$	Qty	\$	Qty	\$	Q	ty	\$	Qty	\$	Qty	\$
PRIOR YEARS																									0	0.0
FY 2002 EQUIPMENT																									0	0.0
FY 2003 EQUIPMENT									0	0.0															0	0.0
FY 2004 EQUIPMENT											0	0.0													0	0.0
FY 2005 EQUIPMENT														2	10.0										2	10.0
FY 2006 EQUIPMENT																2	11.3								2	11.3
FY 2007 EQUIPMENT																		0	0.	0					0	0.0
FY 2008 EQUIPMENT																					0	0.0			0	0.0
FY 2009 EQUIPMENT																							0	0.0	0	0.0
TO COMPLETE																									0	0.0
INSTALLATION SCH	<u>H</u> EDUI	L <u>E:</u>										<b>-</b>														
FY 2002			200				<u> 2004</u>			FY 2005			<u> 2006</u>	=			<u> 2007</u>		<u>FY 2</u>				2009		<u>TC</u>	
& Prior		1 2			1		3 4		_	2 3	4	1		_			3 4	1	2		4		3	4		TOTAL
` In 0		0 0	-	_	0	0	0 0			0 0	0			_		2	0 0	0	0	-	0	0 0	-	0	0	4
Out 0		0 0	0	0	0	0	0 0		)	0 0	0	0 1	1	0	0	2	0 0	0	0	0 (	0	0 0	0	0	0	4

CLASSIFICATION:	UNCLASSIFIED																						
P3A			INDIVIDUA	L MOE	DIFICAT	TION																	
MODELS OF SYSTE	EM AFFECTED:	AN/B	YG-1 (SSN2	1)		_	TYPE M	IODIFI	ICATIO	N:	UPGRA	DE		_	MODIFI	CATIO	N TITLI	E:	SSN CO	OMBA <sup>-</sup>	T CONTR	OL SYSTEM	S
DESCRIPTION/JUS	TIFICATION:																						
This program will pron an annual basis	rovide submarine comb	at contr	rol systems v	with Co	OTS-ba	ased up	ogrades	to com	nbat con	itrol and	l tactical	control	hardwa	re and	software	e. Mile	estone [	Decisio	n Autho	rity (M	DA) Produ	uction Review	s are hel
DEVELOPMENT ST	ATUS/MAJOR DEVELO	OPMEN	IT MILESTO	NES:		Deve	lopmen	t Com	pleted 9	9/04; D	r/FOT&E	8/05-2	2/06					_					
		FY 20 QTY	002 & Prior \$			<u>FY</u> QTY	2003 \$	<u>FY</u> QTY	<u>2004</u>	<u>FY</u> QTY	2005 \$	<u>FY</u> QTY	2006 \$	<u>FY</u> QTY	<u>2007</u>	<u>FY</u> QTY	2008 \$	<u>FY</u> QTY	<u>′ 2009</u> \$	QTY	<u>TC</u> \$	<u>TC</u> QTY	TAL \$
FINANCIAL PLAN (I	N MILLIONS)																						

	FY 2002 & Prior QTY \$					2003		2004		2005		2006		2007		2008	FY	2009	OT) (	<u>TC</u> \$		TAL
	QIY	\$ 			QTY	\$	QIY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																						
<u>RDT&amp;E</u>																					0	0.0
<u>PROCUREMENT</u>																					0	0.0
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																					0	0.0
INSTALLATION KITS NONRECURRING																					0	0.0
EQUIPMENT							1	3.2	2	15.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	18.3
EQUIPMENT NONRECURRING																					0	0.0
ENGINEERING CHANGE ORDERS																					0	0.0
DATA																					0	0.0
TRAINING EQUIPMENT																					0	0.0
SUPPORT EQUIPMENT																					0	0.0
OTHER																					0	0.0
INTERIM CONTRACTOR SUPPORT																					0	0.0
OTHER (DSA)									0	0.0	0	1.0	0	0.0	0	0.0	0	0.0		0.0	0	1.0
OTHER (NON-FMP INSTALL)									0	0.9	3	1.5	0	0.0	0	0.0	0	0.0			3	2.4
INSTALL COST									1	7.6	2	15.5	0	0.0	0	0.0	0	0.0	0	0.0	3	23.1
OTHER INSTALL COST																					0	0.0
TOTAL PROCUREMENT							1	\$3.2	2	\$15.1	0	\$0.0	0	\$0.0	0	\$0.0	0	\$0.0	0	\$0.0	3	18.3
							ΙT	EM NO	. 112		PAGE	17							CLAS	SSIFICATIO	N: UNCLA	SSIFIED

CLASSIFICATION: UN	CLAS	SIFIED	)																									
P3A (Continued)				INDI	VIDU	AL N	IODIFI	CAT	ION	(Contin	nued)																	
MODELS OF SYSTEM	S AFF	ECTE	<b>)</b> :	AN/	BYG-	·1 (S	EAWO	DLF)	SSN	21			<u> </u>	MC	DIFIC	CATIO	N TITI	LE: SS	N CO	ИВАТ (	CONT	ROL	SYSTEM	S				
INSTALLATION INFORMETHOD OF IMPLEMENTATION OF IMPLEMENTATION OF IMPLEMENTATION OF THE PROPERTY	ENTA	ΓΙΟΝ:				_	DDO	5110	TION	EAD	TIN 415.			0 M-	41													
ADMINISTRATIVE LEA CONTRACT DATES:		2002:	N//	Α		-	FY 20			N/A	I IIVIE:		1	2 Mo	ntns	FY 2	2004:	De	c-03			FY2	005:	Dec-0	04			
DELIVERY DATE:		2002:	N/			-	FY 20			N/A							2004:		c-04			FY2		Dec-0				
													(\$ in	Millio	ns)													
Cost:	Pric	r Years	5			F	Y 200	3	F	Y 2004		F	Y 2005		FY 20	06	F	Y 2007		FY 200	08	F	Y 2009	To	o Co	mplete	7	Total
	Qty	\$				Qty	\$		Qty	\$	(	Qty	\$	Qty		\$	Qty	\$	Qty	, ;	\$	Qty	\$	Q	Qty	\$	Qty	\$
PRIOR YEARS																											0	0.0
FY 2002 EQUIPMENT	-																										0	0.0
FY 2003 EQUIPMENT	-								0	0.0	)																0	0.0
FY 2004 EQUIPMENT	-											1	7.6														1	7.0
FY 2005 EQUIPMENT	-													2	2 1	5.5											2	15.
FY 2006 EQUIPMENT	-																0	0.0									0	0.0
FY 2007 EQUIPMENT	-																		(	) (	0.0						0	0.0
FY 2008 EQUIPMENT	-																					0	0.0				0	0.0
FY 2009 EQUIPMENT	-																								0	0.0	0	0.0
TO COMPLETE																											0	0.0
INSTALLATION SC	<u>H</u> EDU!	L <u>E:</u>																										
FY 2002		FY	2003	3		FY:	2004			FY 20	<u>005</u>		FY	2006				<u> 2007</u>		FY	<u> 2008</u>		<u> </u>	FY 20	009		<u>TC</u>	
& Prior		1 2			1		3	4	1	2	3	4	1 2		4	1		3 4	$\dashv \vdash$	2	3	4	1	2		4		TOTAL
) In 0		0 0	-	- 1	0	0	0	0	0	1	0	0	0 1	0	1	0	0	0 0		_	0	0	0	-	0	0	0	3
Out 0		0 0	0	0	0	0	0	0	0	1	0	0	0 1	0	1	0	0	0 0	0	0	0	0	0	0	0	0	0	3

CLASSIFICATION:	UNCLASSIFIED

02.000.00.000.						
P3A	INDIVIDUAL MODIFICATION					
MODELS OF SYSTEM AFFECTED:	AN/BYG-1 (SSN774)	TYPE MODIFICATION:	UPGRADE	MODIFICATION TITLE:	SSN COMBAT CONTROL SYSTEMS	
DESCRIPTION/ ILISTIFICATION:						

#### DESCRIPTION/JUSTIFICATION

This program will provide upgrades for submarine combat systems with upgraded combat control and tactical control hardware and software. This program funds the procurement of the first two Virginia Class upgrade kits. The installation of these two upgrade kits and the procurement and installation of all subsequent Virginia Class AN/BYG-1 upgrade kits will be funded through the Virginia Class funding lines. Milestone Decision Authority (MDA) Production Reviews are held on an annual basis.

DEVELOPMENT STATUS/MAJOR DEVELO	PMEN	NT MILESTO	NES:	Deve	lopmen	t Com	pleted 9	9/04; D	T/FOT&E	E 8/05-	2/06					_					
		002 & Prior			2003		<u> 2004</u>		<u> 2005</u>		2006		<u>/ 2007</u>		2008		<u>/ 2009</u>		<u>TC</u> \$		<u>TAL</u>
	QTY	\$		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																					
RDT&E																				0	0.0
<u>PROCUREMENT</u>																				0	0.0
INSTALLATION KITS																				0	0.0
INSTALLATION KITS - UNIT COST																				0	0.0
INSTALLATION KITS NONRECURRING																				0	0.0
EQUIPMENT								2	5.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	5.6
EQUIPMENT NONRECURRING																				0	0.0
ENGINEERING CHANGE ORDERS																				0	0.0
DATA																				0	0.0
TRAINING EQUIPMENT																				0	0.0
SUPPORT EQUIPMENT																				0	0.0
OTHER																				0	0.0
INTERIM CONTRACTOR SUPPORT																				0	0.0
OTHER (DSA)								0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
OTHER (NON-FMP INSTALL)								1	0.8	0	0.0	0	0.0	0	0.0	0	0.0			1	0.8
INSTALL COST								1	3.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	3.3
OTHER INSTALL COST																				0	0.0
TOTAL PROCUREMENT						0	\$0.0	2	\$5.6	0	\$0.0	0	\$0.0	0	\$0.0	0	\$0.0	0	\$0.0	2	\$5.6

CLASSIFICATION: UN	CLA	SSIFIED																								
P3A (Continued)				INDI	/IDUA	L M	ODIFICA	TION	(Contir	nued)	)															
MODELS OF SYSTEM	S AFF	ECTED	): _	AN/E	BYG-1	(VI	RGINIA)	(SSN	N774)				N	1OD	IFICATIO	N TIT	LE: SSN	COM	IBAT CON	NTROL	SYSTE	MS				
INSTALLATION INFOR																										
ADMINISTRATIVE LEA							PRODUC	CTION	LEAD	TIME	:		12 N	1ont	hs											
CONTRACT DATES:		′ 200 <mark>2</mark> :					FY 2003		N/A							2004:	Dec			_	200 <u>5:</u>		ec-04			
DELIVERY DATE:	F١	′ 2002:	N/A	١			FY 2003:	:	N/A						FY	2004:	Dec	-04		FY:	200 <u>5:</u>	De	ec-05			
												(\$	in Milli	ions	s)											
Cost:		or Years					Y 2003		Y 2004			Y 2005			Y 2006		Y 2007		Y 2008		FY 2009			mplete		Total
	Qty	\$			(	Qty	\$	Qty	\$		Qty	\$	Q	ty	\$	Qty	\$	Qty	\$	Qty	\$		Qty	\$	Qty	\$
PRIOR YEARS         0           FY 2002 EQUIPMENT         0           FY 2003 EQUIPMENT         0           FY 2004 EQUIPMENT         1           3.3         1															0.0											
FY 2002 EQUIPMENT         0           FY 2003 EQUIPMENT         0           0         0.0															0.											
FY 2002 EQUIPMENT         0           FY 2003 EQUIPMENT         0         0.0															0.											
FY 2002 EQUIPMENT         0           FY 2003 EQUIPMENT         0           0         0.0           FY 2004 EQUIPMENT         1           3.3         1														3.												
FY 2003 EQUIPMENT         0         0.0         0														0.												
FY 2003 EQUIPMENT         0         0.0         0           FY 2004 EQUIPMENT         1         3.3         1														0.												
FY 2007 EQUIPMENT																		0	0.0						0	0.
FY 2008 EQUIPMENT																				C	0	.0			0	0.
FY 2009 EQUIPMENT																							0	0.0	0	0.
TO COMPLETE																									0	0.
INSTALLATION SCI	<u>H</u> EDU	L <u>E:</u>						_																		
FY 2002		FY	2003	<u> </u>	ļ	FY 2	2004		FY 2	005		<u> </u>	FY 200	<u>)6</u>		FY	2007		FY 200	<u>8</u>		FY	2009		<u>TC</u>	
& Prior		1 2	3	4	1	2	3 4	1	2	3	4	1	2	3	4 1	_ 2	3 4	1	2 3	4	1	2	3	4		TOTAL
` In 0		0 0	0	0	0	0	0 0	0	1	0	0	0	0	0	0 0	0	0 0	0	0 0	0	0	0	0	0	0	1
Out 0		0 0	0	0	0	0	0 0	0	0	1	0	0	0	0	0 0	0	0 0	0	0 0	0	0	0	0	0	0	1
							ITEM NO	112				20							CI	VOCIL	ICATION	P-:		CIEIED		
							I I E IVI IV	J. 112				∠∪							UL	400IF	ICATION	v. Ul	NOLAS	SIFIED		

CLASSIFICATION: UNCLASSIFIED																					
P3A		INDIVIDUA	L MODII	FICATION																	
MODELS OF SYSTEM AFFECTED:	Tech I	nsertion (TI00/	TI02 Basel	ine) - SSN68	8 TYPE I	MODIF	CATIO	N:	UPGRA	DE		_	MODIFIC	CATIC	N TITLE	:	SSN C	OMBA	T CONTRO	L SYSTEMS	3
DESCRIPTION/JUSTIFICATION:																					
This program will provide submarine comb on an annual basis.	at cont	rol systems	with CO	TS based	upgrades	to con	nbat con	ntrol and	d tactical	contro	l hardwai	re and	l software	e. Mile	estone D	ecisio	n Autho	rity (M	DA) Produc	tion Review	s are held
L DEVELOPMENT STATUS/MAJOR DEVELO	OPMEN	NT MILESTO	ONES:	Dev	elopme	nt Com	pleted 9	9/04; D	T/FOT&E	E 8/05-	2/06										
	FY 2 QTY	002 & Prior \$			Y 2003 Y \$	<u>F\</u> QTY	<u>/ 2004</u> \$	<u>F\</u> QTY	<u>/ 2005</u> \$	<u>FY</u> QTY	<u>′ 2006</u> \$	<u>F\</u> QTY	<u>/ 2007</u> \$	<u>FY</u> QTY	<u>′ 2008</u> \$	<u>FY</u> QTY	<u>′ 2009</u> \$	QTY	<u>TC</u> \$	<u>TO'</u> QTY	TAL \$
FINANCIAL PLAN (IN MILLIONS)																	·				·
RDT&E																				0	0.0
<u>PROCUREMENT</u>																				0	0.0
INSTALLATION KITS																				0	0.0
INSTALLATION KITS - UNIT COST																				0	0.0
INSTALLATION KITS NONRECURRING																				0	0.0
EQUIPMENT								5	17.3	5	17.3	4	13.8	1	3.7	0	0.0	0	0.0	15	52.1
EQUIPMENT NONRECURRING																				0	0.0
ENGINEERING CHANGE ORDERS																				0	0.0
DATA																				0	0.0
TRAINING EQUIPMENT																				0	0.0
SUPPORT EQUIPMENT																				0	0.0
OTHER																				0	0.0
INTERIM CONTRACTOR SUPPORT																				0	0.0
OTHER (DSA)								0	0.0	0	3.1	0	3.3	0	2.6	0	0.5		0.0	0	9.6
OTHER (NON-FMP INSTALL)								0	0.0	5	2.5	5	2.4	4	1.8	1	0.4			15	7.1
INSTALL COST								0	0.0	5	16.4	5	18.4	4	14.3	1	3.1	0	0.0	15	52.2
TOTAL PROCUREMENT						0	\$0.0 EM NO	5	\$17.3	5 PAGE	\$17.3	4	\$13.8	1	\$3.7	0	\$0.0	0	\$0.0 SSIFICATIO	15	\$52.1
						- 11	LIVI INO	. 112		LAGE								CLA	SOIFICATIO	IN. UNCLA	JUILIED

CLASSIFICATION: UNC	CLAS	SSIFIED																				
P3A (Continued)				NDIVIDU	AL N	MODIFICA	TION	(Continue	d)										,		,	
MODELS OF SYSTEMS	AFF	ECTED:	: _	Tech Ins	ertion	from (TI0	0/TI02	2 Baseline)	- SSN	1688	МО	DIFICAT	ION TI	TLE: SSI	N COM	BAT CON	ITROL	SYSTEMS	j			
INSTALLATION INFORI METHOD OF IMPLEME	NTA	TION:																				
ADMINISTRATIVE LEAF					_			LEADTIN	E:	12	2 Mor		<del></del>									
CONTRACT DATES: DELIVERY DATE:		′ 2002: ′ 2002:	N/A N/A		-	FY 2003: FY 2003:		N/A N/A					Y 2004: Y 2004:						Dec-04 Dec-05			
DELIVERY BATE.		2002.	,,,		_	2000						•	. 200				_ ' '-	.000.	-00 00			
0															T-4-1							
COST:																					·	1 otal \$
	Q.,	Ť			α.,	<b>*</b>	Q.y	<u> </u>	α.,	<u> </u>	Q.y	<u> </u>	<u> </u>	<b>+</b> •	Q.iy	Ψ	Q.y		<u> </u>	Ψ	α.,	
PRIOR YEARS																					0	0.0
FY 2002 EQUIPMENT																					0	0.0
FY 2003 EQUIPMENT							0	0.0													0	0.0
FY 2004 EQUIPMENT									0	0.0											0	0.0
FY 2005 EQUIPMENT											5	16.4									5	16.4
FY 2006 EQUIPMENT													5	18.4							5	18.4
FY 2007 EQUIPMENT															4	14.3					4	14.3
FY 2008 EQUIPMENT																	1	3.1			1	3.
FY 2009 EQUIPMENT																			0	0.0	0	0.0
TO COMPLETE																					0	0.0
INSTALLATION SCH	EDU	L <u>E:</u>					1 [											1				
FY 2002 & Prior			<u>2003</u> 3		<u>FY</u> 2	2004 3 4		FY 2005 2 3	4	1 2	<u>2006</u> 3	4	<u>FY</u> 1 2	2007 3 4		FY 2008	_		Y 2009 2 3	4	TC	TOTAL
` In 0	1	0 0		0 0	0	0 0	0	0 0	0	1 1	2		1 2	1 1	1	1 1	1		1 0	0	0	15
Out 0		0 0	0	0 0	0	0 0	0	0 0	0	1 1	2	1	1 1	2 1	1	1 1	1	0	0 1	0	0	15

CLASSIFICATION: UNCLASSIFIED																					
P3A		INDIVIDU	AL MODI	FICATION																	
MODELS OF SYSTEM AFFECTED:	Tech	Insertion (TI	04 Baselir	ne) - SSN6	88 TYPE	MODIF	ICATIO	N:	UPGRA	DE		_	MODIFI	CATIC	N TITLE	:	SSN C	OMBA	T CONTRO	L SYSTEMS	3
DESCRIPTION/JUSTIFICATION:																					
This program will provide submarine comb on an annual basis.	at cont	rol systems	with CO	TS based	upgrades	to cor	nbat con	itrol and	d tactical	contro	l hardwa	re and	software	e. Mile	estone D	ecisio	n Autho	rity (M	DA) Produc	tion Review	s are held
DEVELOPMENT STATUS/MAJOR DEVELO	OPMEN	NT MILEST	ONES:	De	/elopmei	nt Con	pleted :	3/06; D	T/FOT&I	E 10/06	-4/07										
	FY 2 QTY	002 & Prior \$		<u>l</u> QT	<u>Y 2003</u>	<u>F`</u> QTY	<u>Y 2004</u> * \$	<u>F\</u> QTY	<u>/ 2005</u> \$	<u>FY</u> QTY	<u>2006</u> \$	<u>F\</u> QTY	<u>′ 2007</u> \$	<u>F\</u> QTY	<u>′ 2008</u> \$	<u>FY</u> QTY	<u>/ 2009</u> \$	QTY	<u>TC</u> \$	<u>TO'</u> QTY	TAL \$
FINANCIAL PLAN (IN MILLIONS)																					
RDT&E																				0	0.0
<u>PROCUREMENT</u>																				0	0.0
INSTALLATION KITS																				0	0.0
INSTALLATION KITS - UNIT COST																				0	0.0
INSTALLATION KITS NONRECURRING																				0	0.0
EQUIPMENT								0	0.0	0	0.0	1	0.8	9	6.2	8	3.7	0	0.0	18	10.7
EQUIPMENT NONRECURRING																				0	0.0
ENGINEERING CHANGE ORDERS																				0	0.0
DATA																				0	0.0
TRAINING EQUIPMENT																				0	0.0
SUPPORT EQUIPMENT																				0	0.0
OTHER																				0	0.0
INTERIM CONTRACTOR SUPPORT																				0	0.0
OTHER (DSA)								0	0.0	0	0.0	0	0.0	0	0.0	0	5.0		0.0	0	5.0
OTHER (NON-FMP INSTALL)								0	0.0	0	0.0	0	0.0	1	0.5	9	4.2			10	4.6
INSTALL COST								0	0.0	0	0.0	0	0.0	1	1.4	9	11.8	8	9.4	18	22.5
TOTAL PROCUREMENT						0	\$0.0	0	\$0.0	0	\$0.0	1	\$0.8	9	\$6.2	8	\$3.7	0	\$0.0	18	10.7

| 0 | \$0.0 | 0 | \$0.0 | 0 | \$0.0 | 1 | \$0.8 | 9 | \$6.2 | 8 | \$3.7 | 0 | \$0.0 | 18 | 10.7 |
| TEM NO. 112 | PAGE23 | CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UN	ICLAS	SIFIE	)																							
P3A (Continued)				INDI	IVIDU	AL N	ODIFICA	TION	(Cont	inued	i)															
MODELS OF SYSTEM	S AFF	ECTE	D:	Tec	hnolo	gy In	sertion fro	om (TI	04 Ba	seline)	) - SS	N688	M	10DIF	CATIC	N TIT	LE: SS	N CON	ИВАТ (	CONT	ROL	SYSTEMS				
INSTALLATION INFOF						_																				
ADMINISTRATIVE LEA			• • • • • • • • • • • • • • • • • • • •			_	PRODU			DTIME	E:		12 N	lonths							<b>5</b> ) (0					
CONTRACT DATES: DELIVERY DATE:		2002: 2002:	N/2 N/2			_	FY 2003 FY 2003		N/A N/A							2004: 2004:	N/A N/A				FY2		I/A I/A			
DEENVERT BATE.		2002.	14//			_	1 1 2000	<i>"</i> —	14// (							2004.	14/7					00 <u>0. 1</u>	1// (			
	15.	.,					71.0000		<del>-</del>				in Mill				->/ 000-					-1/ 0000				<del></del>
Cost:	Qty	r Years	3			Qty	Y 2003 \$	Qty	FY 200	)4 \$	Qty	Y 2005 \$		FY 2	\$	Qty	Y 2007	Qty	FY 200		Qty	FY 2009 \$	Qty	Complete \$	Qty	Total \$
	Qty	Ψ				Qty	Ψ	Qty		Ψ	Qty	Ψ	Q	ty	Ψ	Qty	Ψ	Qty	,	Ψ	Qty	Ψ	Qty	Ψ	Qty	Ψ
PRIOR YEARS																									0	0.0
FY 2002 EQUIPMENT	-																								0	0.0
FY 2003 EQUIPMENT	ī							(	) (	0.0															0	0.0
FY 2004 EQUIPMENT	ī										0	0.0	)												0	0.0
FY 2005 EQUIPMENT	-													0	0.0										0	0.0
FY 2006 EQUIPMENT	_															0	0.0								0	0.0
FY 2007 EQUIPMENT	_																	1	1 1	1.4					1	1.4
FY 2008 EQUIPMENT	-																				9	11.8			9	11.8
FY 2009 EQUIPMENT	-																						8	9.4	8	9.4
TO COMPLETE																									0	0.0
INSTALLATION SC	HEDU	LE:												·									·			
FY 2002		<u>FY</u>	200	_		FY:	<u> 2004</u>		<u>FY</u>	<u>2005</u>		-	FY 200				2007		FY	<u> 2008</u>			Y 2009	9	<u>TC</u>	
& Prior		1 2		- —	1	2	3 4	-11-	2	3	4			3 4		_ 2	3 4	-11-	2_	3	4	-	2 3			TOTAL
) In 0		0 0			0	0	0 0		0	0	0	_	-	0 0		0	0 0			0	0		2 3		8	18
Out 0		0 0	0	0	0	0	0 0	0	0	0	0	0	0	0 0	0	0	0 0	0	0	1	0	1	2 3	3	8	18

CLASSIFICATION: UNCLASSIFIED																						
РЗА		INDIVIDUA	L MO	DIFICA	TION																	
MODELS OF SYSTEM AFFECTED:	Tech I	Insertion (TI04	Baselin	e) - SSBN	٧_	TYPE N	/ODIF	ICATIO	N:	UPGRA	DE		_	MODIFI	CATIC	N TITLE	<b>:</b> :	SSN C	OMBA	T CONTRO	L SYSTEMS	3
DESCRIPTION/JUSTIFICATION:																						
This program will provide submarine comb	at cont	rol systems	with C	OTS ba	ased up	ogrades	to cor	nbat cor	itrol and	d tactical	contro	l hardwa	re and	softwar	e. Mile	estone D	ecisio	n Autho	rity (M	DA) Produc	tion Review	s are
being held on an annual basis.																						
DEVELOPMENT STATUS/MAJOR DEVELO	OPMEN	NT MILESTO	DNES		Deve	lopmen	t Con	pleted	6/07; D	T/FOT&	E 1/08-	10/08					_					
FY 2002 & Prior FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 TC TOTAL  QTY \$																						
			1	1															QTY	\$		
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
<u>PROCUREMENT</u>																					0	0.0
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																					0	0.0
INSTALLATION KITS NONRECURRING																					0	0.0
EQUIPMENT									0	0.0	0	0.0	0	0.0	2	1.1	0	0.0	0	0.0	2	1.1
EQUIPMENT NONRECURRING																					0	0.0
ENGINEERING CHANGE ORDERS																					0	0.0
DATA																					0	0.0
TRAINING EQUIPMENT																					0	0.0
SUPPORT EQUIPMENT																					0	0.0
OTHER																					0	0.0
INTERIM CONTRACTOR SUPPORT																					0	0.0
OTHER (DSA)										0.0		0.0		0.0		0.0		1.3		0.0	0	1.3
OTHER (NON-FMP INSTALL)									0	0.0	0	0.0	0	0.0	0	0.0	2	0.9			2	0.9
INSTALL COST									0	0.0	0	0.0	0	0.0	0	0.0	2	2.9	0	0.0	2	2.9

0 \$0.0 0 ITEM NO. 112

TOTAL PROCUREMENT

\$0.0 0 \$0.0 0 \$0.0 2 \$1.1 0 \$0.0 PAGE 25

 0
 \$0.0
 2
 1.1

 CLASSIFICATION:
 UNCLASSIFIED

CLASSIFICA	TION: UN	CLAS	SIFIE	D																												
P3A (Continu	ued)				IN	DIV	IDU	AL M	IODIF	ICA	TION	(Con	inuec	d)																		
MODELS OF	SYSTEMS	S AFF	ECTE	D:		ech	Inse	ertion	from	(TIO	4 Bas	eline)	- SSE	BN		_	МО	DIFIC	ATIO	N TIT	LE:	SSN	СОМ	BAT C	ITNC	ROL	SYSTE	MS				
INSTALLATION OF	-		_																													
ADMINISTR/											-	N LEA	DTIMI	E:		12	Mor	nths		_												
CONTRACT			2002:		N/A					2003:		N/A				_				2004:		N/A				FY2		N/				
DELIVERY D	DATE:	FY	2002:		N/A			_	FY 2	2003:		N/A				=			FY 2	2004:		N/A				FY2	00 <u>5:</u>	N/	/A			
																(\$ in [	Million	ns)														
Cos	st:			rs					Y 200			Y 20			FY 20			Y 200			Y 200			Y 2008			Y 2009			•		Γotal
Qty         \$         Qty         \$<														\$																		
PRIOR YEA	ARS																														0	0.0
FY 2002 EC	QUIPMENT	,																													0	0.0
FY 2003 EC	QUIPMENT										C	) (	0.0																		0	0.0
FY 2004 EC	QUIPMENT													0	(	0.0															0	0.0
FY 2005 EC	QUIPMENT																0	C	0.0												0	0.0
FY 2006 EC	QUIPMENT																			0	0	.0									0	0.0
FY 2007 EC	QUIPMENT																						0	0.0	)						0	0.0
FY 2008 EC	QUIPMENT																									2	2.9	9			2	2.9
FY 2009 EC	QUIPMENT																												0	0.0	0	0.0
TO COMPL	ETE.																														0	0.0
INSTALLA	ATION SCH	iEDUI	_E:								, ,				, ,																	
	FY 2002			Y 20					2004			-	2005				<u> 2006</u>				2007			FY 20					2009		<u>TC</u>	
	& Prior				3 4	<b>-</b>	1		3	4	1	2_	3	4	1		3	4	1		3	4	1	2	3	4			3	4		TOTAL
` In	0				0 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			0	0	2
Out	0		0	0	0 0	) [	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
																												_				

CLASSIFICATION: UNCLASSIFIED																						
РЗА		INDIVIDUA	L MO	DIFICA	TION																	
MODELS OF SYSTEM AFFECTED:	Tech I	Insertion (TI04	Baselin	e) - SSGN	<u> </u>	TYPE N	/ODIF	CATIO	N:	UPGRA	DE		_	MODIFI	CATIC	N TITLE	:	SSN C	OMBA	T CONTRO	L SYSTEMS	3
DESCRIPTION/JUSTIFICATION:																						
This program will provide submarine comb on an annual basis.	at cont	rol systems	with C	OTS ba	ased up	ogrades	to cor	nbat cor	itrol and	d tactical	contro	l hardwa	re and	l software	e. Mile	estone D	ecisio	n Autho	rity (M	DA) Produc	tion Review	s are held
L DEVELOPMENT STATUS/MAJOR DEVELO	OPMEN	NT MILESTO	ONES:		Deve	lopmen	t Con	pleted	6/07; D	T/FOT&	E 1/08-	10/08										
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:   Development Completed 6/07; DT/FOT&E 1/08-10/08															<u>TO'</u> QTY	TAL \$						
FINANCIAL PLAN (IN MILLIONS)						· ·				,				Ť		*		Ť		*		*
RDT&E																					0	0.0
<u>PROCUREMENT</u>																					0	0.0
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																					0	0.0
INSTALLATION KITS NONRECURRING																					0	0.0
EQUIPMENT									0	0.0	0	0.0	0	0.0	0	0.0	4	1.8	0	0.0	4	1.8
EQUIPMENT NONRECURRING																					0	0.0
ENGINEERING CHANGE ORDERS																					0	0.0
DATA																					0	0.0
TRAINING EQUIPMENT																					0	0.0
SUPPORT EQUIPMENT																					0	0.0
OTHER																					0	0.0
INTERIM CONTRACTOR SUPPORT																					0	0.0
OTHER (DSA)										0.0		0.0		0.0		0.0		0.0		0.0	0	0.0
OTHER (NON-FMP INSTALL)									0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	1.9	4	1.9
INSTALL COST									0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	4.7	4	4.7

0 \$0.0 0 ITEM NO. 112

TOTAL PROCUREMENT

\$0.0 0 \$0.0 0 \$0.0 0 \$0.0 4 \$1.8 PAGE 27

 0
 \$0.0
 4
 1.8

 CLASSIFICATION:
 UNCLASSIFIED

CLASSIFICATION: U	NCLAS	SSIFIED																							
P3A (Continued)			INE	DIVIDU	AL M	ODIFICA	TION	(Contin	nued)																
MODELS OF SYSTEM	IS AFF	ECTED:	Te	ch Inse	ertion	from (TIC	)4 Bas	seline) -	SSGN			МО	DIFICA	OITA	N TITL	LE: SSN	COV	MBAT C	ONTR	OL S	SYSTEMS				
INSTALLATION INFO METHOD OF IMPLEM ADMINISTRATIVE LE	ENTA	TION:			_	PRODU	CTION	N LEAD	TIME:		12	. Mor	nths												
CONTRACT DATES:		2002:	N/A		-	FY 2003		N/A						FY 2		Dec					· · <u>-                                     </u>	ec-04			
DELIVERY DATE:	FY	2002:	N/A		_	FY 2003	:	N/A			_			FY 2	004:	Dec	-04		'	FY2(	00 <u>5:</u> D	ec-05			
											(\$ in [														
Cost:         Prior Years         FY 2003         FY 2004         FY 2005         FY 2006         FY 2007         FY 2008         FY 2009         To Complete         Tot           Qty         \$         Qty <td>Total</td>														Total											
	Qty	\$			Qty	<b>\$</b>	Qty	\$	Q	ty	\$	Qty	<b></b>		Qty	\$	Qty	<b></b>		אָזע	\$	Qty	\$	Qty	\$
PRIOR YEARS																								0	0.0
FY 2002 EQUIPMEN	Т																							0	0.0
FY 2003 EQUIPMEN	Т						C	0.0	0															0	0.0
FY 2004 EQUIPMEN	Т									0	0.0													0	0.0
FY 2005 EQUIPMEN	Т											0	0.	.0										0	0.0
FY 2006 EQUIPMEN	Т														0	0.0								0	0.0
FY 2007 EQUIPMEN	Т																0	0.	.0					0	0.0
FY 2008 EQUIPMEN	Т																			0	0.0			0	0.0
FY 2009 EQUIPMEN	Т																					4	4.7	4	4.7
TO COMPLETE																								0	0.0
INSTALLATION SC	<u>H</u> EDU	L <u>E:</u>															<b>-</b>								,
FY 2002			<u> 2003</u>		FY 2	<u> 2004</u>		FY 20	<u>005</u>		FY:	<u> 2006</u>				<u> 2007</u>		FY 2	<u>8008</u>		<u>FY</u>	2009		<u>TC</u>	
& Prio	<u>-</u>		3 4	1	2	3 4		2			1 2	3	4	1	2	3 4	1	2	3	4	1 2		4		TOTAL
) In 0		0 0	0 0		0	0 0	0	-			0 0	0	0	0	0	0 0	0	0	0	0	0 0	_	0	4	4
Out 0		0 0	0 0	0	0	0 0	0	0	0 (	) (	0 0	0	0	0	0	0 0	0	0	0	0	0 0	0	0	4	4

CLASSIFICATION:	UNCLASSIFIED
CLASSIFICATION:	UNCLASSIFIED

P3A	INDIVIDUAL MODIFICATION				
MODELS OF SYSTEM AFFECTED:	Tech Insertion (TI04 Baseline) - SSN21 TYPE MODIFICATION:	UPGRADE	MODIFICATION TITLE:	SSN COMBAT CONTROL SYSTEMS	

## DESCRIPTION/JUSTIFICATION:

This program will provide upgrades for submarine combat systems with upgraded combat control and tactical control hardware and software. This program funds the program and installation of the first Virginia Class upgrade as well as the procurement of the second upgrade kit. The installation of the second upgrade kit and the procurement and installation of all subsequent Virginia Class AN/BYG-1 upgrade kits will be funded through the Virginia Class funding lines. Milestone Decision Authority (MDA) Production Reviews are being held on an annual basis.

DEVELOPMENT STATUS/MAJOR DEVELO	OPMEN	NT MILESTO	NES:	Deve	lopmen	t Com	pleted 6	6/07; D	T/FOT&E	4/08-	10/08					-					
	FY 2	002 & Prior		FY	2003	F۱	<u> 2004</u>	FY	2005	FY	2006	F۱	/ 2007	FY	2008	FY	2009		TC	то	TAL
	QTY			QTY		QTY		QTY	\$	QTY		QTY		QTY		QTY		QTY	<u>TC</u> \$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																					
RDT&E																				0	0.0
<u>PROCUREMENT</u>																				0	0.0
INSTALLATION KITS																				0	0.0
INSTALLATION KITS - UNIT COST																				0	0.0
INSTALLATION KITS NONRECURRING																				0	0.0
EQUIPMENT								0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	1	0.6
EQUIPMENT NONRECURRING																				0	0.0
ENGINEERING CHANGE ORDERS																				0	0.0
DATA																				0	0.0
TRAINING EQUIPMENT																				0	0.0
SUPPORT EQUIPMENT																				0	0.0
OTHER																				0	0.0
INTERIM CONTRACTOR SUPPORT																				0	0.0
OTHER (DSA)									0.0		0.0		0.0		0.0		0.6		0.0	0	0.6
OTHER (NON-FMP INSTALL)								0	0.0	0	0.0	0	0.0	0	0.0	1	0.4			1	0.4
INSTALL COST								0	0.0	0	0.0	0	0.0	0	0.0	1	1.6	0	0.0	1	1.6
TOTAL PROCUREMENT						0	\$0.0	0	\$0.0	0	\$0.0	0	\$0.0	1	\$0.6	0	\$0.0	0	\$0.0	1	0.6

ITEM NO. 112

PAGE 29

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UN	CLAS	SSIFIED																							
P3A (Continued)				INDIVI	DUAL	MODII	FICA	TION (	Contin	ued)															
MODELS OF SYSTEMS	SAF	ECTED	): _	Tech	Inserti	on from	ı (TIO	4 Base	eline) - S	SSN21			МО	DIFIC	ATIO	N TITI	LE: SSN	COM	IBAT CON	NTROL	. SYSTEM	18			
INSTALLATION INFOR	NTA	TION:																							
ADMINISTRATIVE LEA CONTRACT DATES:		1E: / 2002:	N/A				DDUC 2003:	-	LEADT N/A	IME:	_	12	2 Moi	nths	EV 2	2004:	N/A			EV.	2005:	N/A			
DELIVERY DATE:			N/A				2003. 2003:		N/A							2004:	N/A				200 <u>5.                                   </u>	N/A			
												<u> </u>	B 4****	,											
Cost:	Pri	or Years				FY 20	03	F	Y 2004		FY	(\$ in / 2005	Millior	is) -Y 20	06	l F	Y 2007	l F	Y 2008		FY 2009	ΙΤα	o Complete		Total
	Qty				Q		\$	Qty	\$	Q	ty	\$	Qty		\$	Qty	\$	Qty	\$	Qty			Qty \$	Qty	\$
PRIOR YEARS																								0	0.0
FY 2002 EQUIPMENT																								0	0.
FY 2003 EQUIPMENT								0	0.0	1														0	0.
FY 2004 EQUIPMENT											0	0.0												0	0.
FY 2005 EQUIPMENT													0	(	0.0									0	0.
FY 2006 EQUIPMENT																0	0.0							0	0.
FY 2007 EQUIPMENT																		0	0.0					0	0.
FY 2008 EQUIPMENT																				1	1.6	3		1	1.
FY 2009 EQUIPMENT																							0.0	0	0.
TO COMPLETE																								0	0.
INSTALLATION SCH	IEDU T		0000			/ 000 /		1	E)/ 00	.05	—ı	E) (	0000				0007	1	E)/ 000		1	F)/ 00	00		ı — —
FY 2002 & Prior			2003 3	-		<u>Y 2004</u> 2 3	4	,	<u>FY 20</u> 2		,		2006	4	1	<u>FY 2</u>	2 <u>007</u> 3 4	$\prod_{a}$	FY 200 2 3	_	1	FY 20		<u>TC</u>	TOTAL
`In 0			0	$\neg$		$\frac{2}{0} \frac{3}{0}$	<u>4</u> 0	0			0	0 0	<u>3</u> 0	<u>4</u> 0	0	0	0 0		$\frac{2}{0}$ $\frac{3}{0}$		$\frac{1}{0}$	<u>2</u> 1	$\frac{3}{0} \frac{4}{0}$	0	1
Out 0			0	_		0 0	0		-		0	0 0	0	0	0	0	0 0		0 0		0	-	0 0	0	'1
	_	<u> </u>			<u>- '</u>			ـــــا د			<u>-</u> L			•							J L	•	- •		
																						P-3A			
						ITE	M NO	. 112				30							CL	ASSIF	ICATION:	UNC	LASSIFIE	)	

## **UNCLASSIFIED**

		BUDO	SET ITEM JUSTIFICA	TION SHEET				DATE:			
			P-40						FEBRU	ARY 2004	
APPROPRIATION/BL	UDGET ACTIVIT	Y				P-1 ITEM NOM	ENCLATURE	•			
OTHER PROCURE	EMENT, NAVY/I	BA-4 Ordnance S	Support Equipment			SUBMARINE AS	W SUPPORT EQU	JIPMENT BL1: 54	3100 SBHD: 846	4	
Program Element for	Code B Items:					Other Related I	Program Elemer	nts			
	Prior	ID								То	
	Years	Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Total
QUANTITY											
COST											
(In Millions)	\$9.0		\$7.3	\$4.9	\$4.8	\$5.0	\$5.1	\$5.2	\$5.3		\$46.6
SPARES COST											
(In Millions)											\$0.0

#### PROGRAM DESCRIPTION/JUSTIFICATION:

This line item procures modifications and improvements to Attack and Ballistic Missile Submarine fire control interface systems, torpedo tube system components and torpedo tube test equipment. These requirements arise as a result of the introduction of new or modified weapons and sensors and their subsequent evaluation test and operational use. Also procured are reliability, maintainability, functional and safety modifications and tactical improvements resulting from operational use experience.

This line funds modifications and improvements in the following categories:

6A002 - The Submarine Torpedo Tube Support category funds in-service support and alteration procurements for all submarine torpedo tubes ejection pumps, handling systems, and countermeasure launchers. Recurring efforts are CASREP support to the fleet units, emergency ORDALTs, Bore Gage/Test Equipment Procurement, Engineering Change Proposal support and prototype ORDALTs. ORDALTs kits are procured to correct significant deficiencies in equipment affecting personnel safety, ship safety and system performance.

6A5IN - Installing agents will be various Naval Shipyards and contractors. All installations will be on SSN 688/21 Class Submarines.

P-1 SHOPPING LIST

ITEM NO. 113 PAGE NO. 1

CLASSIFICATION:

**UNCLASSIFIED** 

CLASSIFICATION:

# UNCLASSIFIED

	WEAPONS SYSTEM C P-5	OST AN	NALYSIS			Weapon Sy	rstem							DATE: FEBRUA	DV 2004
	PRIATION/BUDGET ACTIVITY rocurement, Navy					ID Code	P-1 ITEM N	IOMENCLATU	RE/SUBHEAD	)				TEBROA	KT 2004
	rdnance Support Equipment		1				SUBMAR	RINE ASW	SUPPOR	Γ EQUIPI	MENT BLI	: 543100	SBHD: 8	46A	
			TOTAL COS	T IN THOUS	SANDS OF DO	DLLARS									
COST	ELEMENT OF COST	ID Code	Prior Years		FY 2002		FY 2003			FY 2004			FY 2005		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	SUBMARINE (N77)														
6A002	SUB TORPEDO TUBE SUPPORT	А													
	O/A PROTOTYPE/ECP MATERIAL								903			700			787
	2J COG MATERIAL								233			240			245
	TEST EQUIPMENT														
	BORE GAGE								275			251			298
	TEST FACILITY EQUIPMENT MISC. TEST EQUIPMENT								2370 728			713 271			438 277
	WISC. TEST EQUIFWENT								720			2/1			211
	TEP ORDALTs/TRIDS														
	O/A 16264 TEP QUIET 1						2	431.0	862	2	437.0	874	2	444.0	888
	TPES FIRING VALVE								5 274			2.040			2.022
	TOTAL EQUIPMENT								5,371			3,049			2,933
	SUBMARINE (N77)														
6A5IN	INSTALLATION OF EQUIPMENT (FMP)								1,935			1,863			1,916
									7,306			4,912			4,849

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 113 PAGE NO. 2

**UNCLASSIFIED** CLASSIFICATION:

BUDGET PROCUREN	MENT HIST	ORY AND	PLANNING EXHIBI	T (P-5A)		Weapon System		A. DATE		
								F	EBRUARY 2	2004
B. APPROPRIATION/BUDGET					C. P-1 ITEM NO	MENCLATURE			SUBHEAD	
Other Procureme										
BA-4: ORDNANCI	<u>E SUPPO</u>	RT EQU	PMENT			ASW SUPPORT EQUIPME	NT BL1: 5		846A	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
<u>FY 03</u>										
SUB TORPEDO TUBE O/A 16264 TEP QUIET 1	2	431	NAVSEA		wx	NUWC NEWPORT,RI	JAN 03	OCT 03	YES	
FY 04										
SUB TORPEDO TUBE O/A 16264 TEP QUIET 1	2	437	NAVSEA		wx	NUWC NEWPORT,RI	JAN 04	OCT 04	YES	
FY 05 SUB TORPEDO TUBE O/A 16264 TEP QUIET 1	2	444	NAVSEA		wx	NUWC NEWPORT,RI	JAN 05	OCT 05	YES	
D. REMARKS										

P-1 SHOPPING LIST Classification: DD Form 2446-1, JUL 87 **UNCLASSIFIED** ITEM NO.

113 PAGE NO. 3

CLASSIFICATION:	UNCLASSIFIED					FEBRUARY 2004	
P3A		INDIVIDUAL MODIFICA	ATION				
MODELS OF SYSTE		SUBMARINE ASW SUPPORT	TYPE MODIFICATION:	ORDALT	MODIFICATION TITLE:	SUB TORPEDO TUBE ORDALT	
DESCRIPTION/JUST		EQUIPMENT				16264	
PROJECT UNIT: OF	RDALT 16264 SUBMA	RINE TORPEDO EJECTION PUI	MP MK 5 MODS 15 THROUGH	1 20 UPGRADE REDU	CES THE DETECTION AND CLASSIFICATION	OF THE SSN 688 CLASS SUBMARINE	
WEAPON LAUNCH	SIGNATURE.						

DEVELOPMENT STATUS/MAJOR DEVEL	OPMENT	MILESTO	NES:																			
	FY 2002 QTY	<u>&amp; Prior</u> \$	QTY	<u>FY</u> \$	<u>FY</u> QTY	<u>2003</u>	<u>FY</u> QTY	2004 \$		<u>′ 2005</u> \$		<u>/ 2006</u> \$	F) QTY	<u>Y 2007</u> \$	<u>FY</u> QTY	2008 \$	<u>FY</u> QTY	<u>2009</u> \$	QTY	<u>TC</u> \$	<u>TOTAL</u> QTY	<u> </u>
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
<u>PROCUREMENT</u>																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT	27	8.2	0	0.0	2	0.9	2	0.9	2	0.9	2	0.9	2	0.9	2	0.9	2	0.9			41	14.5
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST	27	15.8	0	0.0	2	1.8	2	1.9	2	1.9	2	1.9	2	2.0	2	2.0	2	2.1			41	29.4
TOTAL PROCUREMENT		24.0		0.0		2.7		2.8		2.8		2.8		2.9		2.9		3.0				43.9
	•						ITE	M NO.	113	P	AGE	4			•			•	CLASS	SIFICATION	N: UNCLASSIFIE	.D

CLASSIFICATION:	UNCL	ASS	IFIED																									FEB	RUARY 2	.004	
P3A (Continued)						INDI	VIDU.	AL N	10DIFIC	OITA	N (C	ontinued)																			
MODELS OF SYSTE	MS A	FFE			SUBM			V	мс	DIF	CAT	ION TITLE:		SU	B TOR	RPEC	O TU	BE OF	RDAL	T 16	264							=			
			_	UPP	EQUIF	PMEN	Т																								
INSTALLATION INF METHOD OF IMPLE																															
METHOD OF IMPLE ADMINISTRATIVE L								-	PRODI	CTIC	N I	EADTIME:		9 M	IONTH	ıs															
CONTRACT DATES		Y:	•						FY 2003	-	), T	Jan-03		<u> </u>	01111	10		FY 2	004:		Jan-04					FY 2	2005:		Jan-05		
DELIVERY DATE:		Y:		_		_			FY 2003		-	Oct-03			_			FY 2	004:		Oct-04				-		2005:		Oct-05		
						_								/¢ :	Millic													,			
os		Prio	r Years		FY	2002		F	Y 2003		-	Y 2004		(\$ II Y 20			FY 20	06		FY:	2007	F۱	1 2008	3		FY 200	19	To Co	omplete	$\overline{}$	Total
-	Qt		\$		Qty			Qty	\$	Qt		\$	Qty		\$	Qty		\$	Qty		\$	Qty		\$	Qty		6	Qty	\$	Qty	\$
									,			·																			
PRIOR YEARS	2	25	14.0																											25	14.0
FY 2002 EQUIPME	NT	2	1.8																											2	1.8
FY 2003 EQUIPME	NT							2	1.	9																				2	1.9
FY 2004 EQUIPME	NT										2	1.9															ļ			2	1.9
FY 2005 EQUIPME	NT												2		1.9															2	1.9
FY 2006 EQUIPME	NT															2	2	1.9												2	1.9
FY 2007 EQUIPME	NT																		2		2.0									2	2.0
FY 2008 EQUIPME	NT																					2		2.0						2	2.0
FY 2009 EQUIPME	NT																								2		2.1			2	2.1
TO COMPLETE																															
INSTALLATION S	CHED	ULE	≣:																												
FY 200	)2		FY 2	2003		_		FY	2004			FY 2005			FY	2006	<u> </u>		<u>F</u>	Y 20	007		FY 2	800			E)	Y 2009		TC	
& Pri	or		1	2	3	4	1	2	3 4	_ L	1	2 3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		TOTAL
In 27			0	1	1	0	0	1	1 0	- (	0	1 1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	41
Out 27			0	1	1	0	0	1	1 0	(	0	1 1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	41
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									ITE	M NC	<b>)</b>	113		5													P-3A		CATION:	LINCI A	SSIFIFD
														J													OLA.	2011 10	/A I I O I 1.	CHULA	

#### CLASSIFICATION:

# **UNCLASSIFIED**

			BUDGET ITEM JUSTIFIC	ATION SHEE	T			DATE:			
			P-40						FEBRU	ARY 2004	
APPROPRIATION/BU	DGET ACTIVIT	Υ				P-1 ITEM NOM	IENCLATURE				
OTHER PROCUR	EMENT, NA	VY BA-	4, ORDNANCE SUPPOR	T EQUIPMEN	Т	SURFA	CE ASW SU	PPORT EQU	<b>IPMENT (544</b>	900 & 54490	5) A46B
Program Element for C	Code B Items:					Other Related	Program Eleme	nts			
	Prior	ID								То	
	Years	Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Total
QUANTITY											
COST											
(In Millions)			\$6.8	\$11.7	\$4.5	\$4.7	\$4.8	\$4.9	\$4.9	Cont.	Cont.
SPARES COST											
(In Millions)											

This line item provides funding to procure Reliability, Maintainability and Availability (RM&A) and Safety modifications through the Ordnance Alteration (ORDALT) process to in-service ASW Fire Control, Surface Vessel Torpedo Tubes and related support and test equipment. These requirements arise as a result of evaluation, testing and Fleet use of existing, new or modified ASW weapons and/or related systems and subsystems. Included in this line item are all related procurements for training and simulation equipment required for the life cycle support efforts of this equipment. ORDALT quantities are highly variable.

Cost Code 6B001 provides funding for Ordnance Alteration (ORDALT) kits for the ASW Underwater Fire Control System (UFCS) MK116 MOD4 and the Control Panel MK309 MOD2. FY03-05 ORDALT procurements include Software Preset/Launch Capability ORDALT (30493) and ORDALT (TBD) for addition of wide angle display, cable terminations and tech refresh of obsolete motherboard parts. Provides material support for the UFCS MK116 and Control Panel MK309 shoresite laboratory at NSWC Dahlgren. Procurements will ensure laboratories are at Fleet baseline configurations. Provides funding for equipment upgrades for the MK331 Torpedo Setting Panel and the Torpedo Presetter Test Set MK432 MOD4/MOD6.

Cost Code 6B004 provides funding for Surface Vessel Torpedo Tubes (SVTT) MK32 and ancillary equipment for testing, training and maintainability. FY04-05 ORDALT procurements include: SVTT ORDALTs (15713, 16627, 16717); Control Box improvement ORDALT (TBD); Emergency Fire Circuit Improvement ORDALT (TBD); Advanced Torpedo Tube Ready Breech (ATTRB); Mount to Magazine Door Interoperability Improvement ORDALT (TBD); Torpedo Loading Tray ORDALT (15714); Air Charging Panel ORDALT (TBD); and MK54 Compatibility ORDALT (TBD); Securing Mechanism MOD ORDALT (TBD); Barrel Guide Modification ORDALT (TBD); Crank Support and Flex Shaft Re-design ORDALT (TBD); Lever and Block Assembly Re-design ORDALT (TBD). Procure Surface Vessel Torpedo Tubes (SVTT) shoresite laboratory equipment for Launcher System Facilities (LSF). LSFs are used to simulate shipboard conditions for over-the-side torpedo launchers in the trouble shooting of Fleet reported problems, as well as for the development of the required ORDALTs.

NOTE: ORDALT procurements are highly variable and dependent on shipboard configurations and equipment age.

Cost Code 6B005 provides fully remanufactured/upgraded SVTT systems to the FFG-7 and DDG-51 Class ships at pre-determined intervals, based on the life of the ship. This program will also provide long-lead launchers and other components to support upgrades, CASREP resolution and ISEA engineering requirements. Funding to establish an overhaul program and remanufacture/upgrade SVTTs was provided through a Congressional plus-up in FY01. An FY04 Congressional plus-up of \$7.0M was authorized for continuance of the overhaul program that provides fully remanufactured/upgraded SVTTs to USN Surface Combatants.

P-1 SHOPPING LIST

CLASSIFICATION:

DD Form 2454, JUN 86 ITEM NO. 114 PAGE 1

**UNCLASSIFIED** 

# CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40		FEBRUARY 2004
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OTHER PROCUREMENT, NAVY BA-4, ORDNANCE SUPPORT EQUIPMENT	SURFACE ASW SUF	PPORT EQUIPMENT (544900 & 544905) A46B
	•	
Cost Code 6B830 provides the necessary engineering support funds to cover the associated ILS elements, ECP reviews	ews, and engineering audits for S	SVTT and Fire Control ORDALT production.
Cost Code 6B860 provides the in-house Navy acceptance test and evaluation funding required for the safety and qua	lity assurance testing of all Fire	Control ORDALTS.
Cost Code 6B900 provides the necessary funding for consulting services required for all scheduling of ORDALT requirements.	production test and installation	n in conjunction with operation, safety and environmental
Cost Code 6B5IN funds installation of all FCS/SVTT ORDALTs and Flexible Universal Stowage System (FUSS) unde ORDALT AIT pier-side installations are variable and contingent on TYCOM scheduling.	r the Fleet Modernization Progra	im (FMP).

P-1 SHOPPING LIST CLASSIFICATION:
DD Form 2454, JUN 86 ITEM NO. 114 PAGE 2

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS DATE: Weapon System P-5 FEBRUARY 2004 APPROPRIATION/BUDGET ACTIVITY ID Code P-1 ITEM NOMENCLATURE/SUBHEAD Other Procurement, Navy **BA-4, ORDNANCE SUPPORT EQUIPMENT** SURFACE ASW SUPPORT EQUIPMENT (544900 & 544905) A46B TOTAL COST IN THOUSANDS OF DOLLARS COST **ELEMENT OF COST** ID FY 2003 FY 2005 FY 2004 Prior CODE Code Years Total Cost Unit Cost Total Cost Unit Cost Total Cost Unit Cost Total Cost Quantity Unit Cost Total Cost Quantity Quantity Quantity 6B001 FIRE CONTROL ORDALTS 875 Α 1,860 1,871 TORPEDO TUBE ORDALTS 6B004 Α 658 1,692 1,726 6B005 SVTT UPGRADES 3,500 7,000 6B830 PRODUCTION ENGINEERING Α 95 348 238 SUPPORT 6B860 FIRE CONTROL ACCEPTANCE T&E 30 170 183 6B900 CONSULTING SERVICES 39 310 324 6B5IN FMP INSTALLATION OF EQUIPMENT (1,583)(313)(197)FIRE CONTROL/SVTT 313 158 197 **FUSS** 1,425 11,693 4,539 6,780

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 114 PAGE 3

### UNCLASSIFIED

		BU	DGET ITEM JUSTIFICA	TION SHEE	T			DATE:			
			P-40						Febru	ary 2004	
APPROPRIATION/BU	JDGET ACTIVIT	Υ				P-1 ITEM NOM	IENCLATURE			-	
OTHER PROCUR	EMENT, NA	VY									
<b>BA 4 - ORDNANC</b>	E SUPPORT	[ EQUIPM	ENT				<b>ASW Rang</b>	e Support Ed	uipment -	BLI: 545500	
Program Element for 0	Code B Items:					Other Related I	Program Elemei		•		
							J				
	Prior	ID								То	
	Years	Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY2009	Complete	Total
QUANTITY											
COST											
(In Millions)			\$7.123	\$7.221	\$7.175	\$7.381	\$7.467	\$7.690	\$7.858	Continuing	Continuing
SPARES COST											
(In Millions)											\$0.0

Funding provides for the procurement of training range and shore support equipment, Test and Evaluation (T&E), and Acoustic Trial range equipment, and weapon system and test support equipment. Equipment procured includes instrumentation for Fleet Operational Readiness Accuracy Check Sites (FORACS) and Naval Undersea Warfare Center, Keyport (NUWC, KPT) T&E ranges, support equipment required to conduct Fleet exercises at Navy ASW Training ranges, Weapon System Accuracy Trials (WSAT) test, and Surface Ship Radiated Noise Measurement (SSRNM). Training and T&E ranges supported include Southern California Offshore Range (SCORE), Barking Sands Tactical Underwater Range/Barking Sands Underwater Range Extension (BARSTUR/BSURE), Atlantic Underwater Test and Evaluation Center (AUTEC), Nanoose, Quinault and Dabob Bay. FORACS ranges supported include Andros Island, Southern California, and Hawaii.

#### 6C001 - Weapon System and Test Support Equipment:

Funding provides for the procurement of high power ESM targets, range communication systems, replacement of obsolete range computers, ship auto-tracking system, Surface Ship Acoustic Range Components, and upgraded ship position tracking system.

#### 6C002 - Training/Test & Evaluation Range Equipment:

Funding provides for the procurement of shipboard underwater tracking equipment for the existing ranges as well as the new Shallow Water Training Ranges on both coasts and in Hawaii, shop special purpose pinger test equipment, and the associated cables/mounting hardware required to track ships and submarines conducting Fleet exercises at the Navy training ranges. NAVSEA provides all of the Navy Underwater Ranges with this tracking equipment support, because the equipment must be compatible with NAVSEA designed and built underwater vehicles (i.e. ships, submarines, torpedoes, mines and sonars).

Funding provides for replacement and modernization of the following NUWC, KPT T&E range systems: Acoustic Noise Measuring Recording and Analysis System, Above Water Tracking System, RF and underwater communications equipment, and range data gathering equipment.

Production support services will fund support efforts performed by a field activity or contractor during the production phase of these projects.

The Unmanned Seaborne Targets Program provides surface seaborne targets and target electronic augmentation systems for weapons systems test and evaluation and Fleet surface to surface and air to surface training. Target requirements include the High Speed Mobile Sea Target (HSMST), the MK42 Mod 0 Floating At Sea Target (FAST) and the High Speed Anti-Radiation Missile/Infared Missile (HARM/IR) Target, Towed Trimaran, William Sled, and Improved Surface Towed Target (ISTT). Inventory objective changes based on Fleet usage. Procurement of replacement targets for the QST-35 is planned to begin in FY05.

6C001- QST 35 Replacement

6C003, 6C004 - The fleet also requires low cost expendable moving targets and stationary targets towed to the operating site for surface, aerial gunnery and missile shots. Trimarans, HARM/IR target, Williams Sleds, and ISTT with tow lines and retrieval systems meet these requirements. The FAST is a free floating radar reflective target developed as an open ocean training device for bombing and surface gunnery exercises. This program also procures seaborne target augmentation systems which include transponders(i.e. transmitters/receivers), radar reflectors, RF emitters and ground support equipment (GSE). Various electronic components provide the interface for the target control systems with the control stations/facilities for drone operations. RF emitters and radar reflectors enhance target threat replication and provide the required stimulus for anti-surface/radar weapons systems.

6C005 - The Fleet requires High Speed Maneuverable Seaborne Targets (HSMST) MK1.

6C006 - SDST (Ship Deployable Surface Target) will be used to support ship training and T&E exercises. This target will support training requirements of deploying ships, aircraft and surface gunnery requirements.

P-1 SHOPPING LIST

ITEM NO. 115 PAGE NO. 1

CLASSIFICATION:

**UNCLASSIFIED** 

DD Form 2454. JUN 86

## **UNCLASSIFIED**

Other Pro	P-5 IATION/BUDGET ACTIVITY OCUTEMENT, Navy RDNANCE SUPPORT EQUIPMENT ELEMENT OF COST					ID Code	In								ry 2004
Other Pro	ocurement, Navy RDNANCE SUPPORT EQUIPMENT						IP-1 II EM N	OMENICI ATLI	RE/SUBHEAD	)				SUBHEAD	
BA 4 - OR	RDNANCE SUPPORT EQUIPMENT					ID Code	I - I I I LIVI IV	OWILINGLATO	INL/OUDITEAL	,				SOBILAD	
COST	ELEMENT OF COST						ASW Rar	nge Suppor	t Equipme	nt BLI: 54	5500			846C	
COST	ELEMENT OF COST		TOTAL COST	T IN THOUS	ANDS OF DO	LLARS	•								
		ID	Prior					FY 2003			FY 2004			FY 2005	
CODE		Code	Years Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	N76														
	EQUIPMENT														
	Weapon System & Test Support Equip.								435			431			404
6C002	Training/Test & Evaluation Range Equip.								580			590			605
	Production Engineering								120			93			99
6C850 F	Product Improvement								82			82			87
8	SEABORNE TARGETS														
6C001	QST 35 REPLACEMENT														736
6C003	TOWED TARGETS								420			581			264
6C004	NSTRUMENTAL								476			155			75
6C005	HSMST						7	154	1,078	8	158	1,264	6	160	960
6C006	SDST (Ship Deployable Surface Target)								0			0			0
6C830 F	PRODUCTION ENGINEERING								161			157			147
6C900	CONSULTING SERVICES								106			112			87
6C970	NTEGRATED LOGISTICS SUPPORT								152			154			130
	N77														
E	EQUIPMENT														
6C001 V	Weapon System & Test Support Equip.								1,255			1,244			1,213
6C002	Training/Test & Evaluation Range Equip.								1,674			1,803			1,810
6C830 F	Production Engineering								348			309			296
6C850 F	Product Improvement								236			246			262
	2446, JUN 86		OPPING LIST			PAGE NO. 2			7,123			7,221 CLASSIFICA			7,175

ITEM NO. 115

<b>BUDGET PROCUR</b>	EMENT HIST	ORY AND	PLANNING EXHIBI	T (P-5A)		Weapon System		A. DATE		
l								F	ebruary 20	004
B. APPROPRIATION/BUDG Other Procurement		BA-4 OF	RDNANCE SPT E	QUIPMENT	C. P-1 ITEM NOM	ENCLATURE SE SUPPORT EQUIPN	IENT B		SUBHEAD	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY03 HSMST FY04 HSMST FY05 HSMST	7 8 6	158	NAVSEA NAVSEA NAVSEA	Dec-02 Jan-04 TBD	GSA GSA GSA	Silver Ships, Inc. Silver Ships, Inc. TBD	Jan 03 Feb 04 TBD	May 03 Jun 04 TBD	YES YES YES	
D. REMARKS										

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST ITEM NO. 115 Classification:

PAGE NO. 3

## **UNCLASSIFIED**

		В	SUDGET ITE	M JUSTIFICA	TION SHEET	Γ			DATE:			
				P-40						February 200	4	
APPROPRIATION/BU	IDGET ACTIVIT	Υ					P-1 ITEM NOMI	ENCLATURE	•			
OTHER PROCUR	EMENT, NAV	/Y/BA-4					EXPL	OSIVE ORD	NANCE DISI	POSAL EQUIPMEN	T/BLI#5	509
Program Element for 0	Code B Items:						Other Related F	rogram Elemer	nts			
0603654N							0204424N/02	204302N				
	Prior	ID								7	o	
	Years	Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Com	plete	Total
QUANTITY												
COST												
(In Millions)		Α	7.6	12.0	25.1	23.8	11.9	16.6	21.2	Co	nt.	Cont.
SPARES COST												
(In Millions)			4.4	4.5	4.7	4.5	2.6	2.6	2.6	Co	nt.	Cont.

The Navy is responsible for the management and execution of the Joint Service EOD unified procurement system as assigned by DOD Directive 5160.62. All procurement of EOD tools and equipment, both initial outfitting and replenishment, for all military services is made by the Navy. The Navy provides all procurement services. There is an annual average of 300 procurement actions for this material. Each military service funds it's own hardware.

#### VN075-EOD EQUIPMENT/SYSTEM:

REMOTE ORDNANCE NEUTRALIZATION SYSTEM CONTINUOUS IMPROVEMENT PROGRAM (RONS CIP): The RONS is a robotic system which consists primarily of a remote controlled vehicle and an operator control station. The RONS CIP provides improvements to performance and increases capabilities of the RONS.

LARGE IMPROVISED EXPLOSIVE DEVICE (IED) ACCESS & DISRUPTION: Provides the EOD technicians an effective and reliable capability to neutralize large IEDs. An Abbreviated Acquisition Program (AAP) with no formal DT/OT required. System testing 12/00 to 2/05.

NON-INVASIVE FILLER IDENTIFICATION: Provides the EOD Technician the capability to identify the filler of conventional and unconventional unexploded ordnance (UXO). An Abbreviated Acquisition Program (AAP) with no formal DT/OT required. System testing 7/03 - 3/05.

EOD MAN TRANSPORTABLE ROBOTIC SYSTEM (MTRS): A two man portable robotic system that provides the EOD Technician the capability to perform EOD tasks. An Abbreviated Acquisition Program (AAP) with no formal DT/OT required. System testing 10/02 to 12/04.

#### VN076- MARINE MAMMAL SYSTEMS/EQUIPMENT:

MMS VSW MCM: This funding supports initial outfitting of hardware and animal behaviors required for the subject systems to operate in a limited hostile environment and enhance system survivability.

This line item received \$1.884 million in FY04 IFF Supplemental funding for EOD Mobile Det. Equipment sets.

P-1 SHOPPING LIST

CLASSIFICATION:

DD Form 2454, JUN 86 ITEM NO. 116 PAGE NO. 1

### **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 CONTINUATION		February 2004
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	•
OTHER PROCUREMENT, NAVY/BA-4	E	OD EQUIPMENT/BLI#5509

VSW ACCESSORY SET: Procurement of enhanced hardware design which allows for the neutralization of mines in the VSW region which are subject to tidal surge and elevated currents.

MMS ALLOWANCE: Initial outfitting of tools/equipment including veterinary equipment for increased allowances of all Fleet MMS in accordance with CNO approved allowance list.

MK 8 MMS: An advanced force system which conducts very shallow water minefield exploration and reconnaissance in support of amphibious operations. MK 8 will operate in low visibility and detect all mine types; buried, proud and moored. This funding supports initial outfitting of all system hardware and components. The following DT/OT is completed/scheduled DT-I 11/98 to 8/99; OT-I 9/99; DT II 11/99 to 2/01: OT II 5/01.

MMS MULTIPLE CAPABILITY: Procurement of enhanced equipment and animal behaviors which allow for multiple MMS capabilities within a single forward deployed MMS.

#### VN077-EOD OUTFITTING:

MATERIAL FOR NAVSCOLEOD: Provides for inert ordnance material to NAVSCOLEOD in support of Joint Service training.

INITIAL OUTFIT DET NAVAL RESERVE: EOD Naval Reserve Mobile Units/Detachments require initial outfitting of equipment on the Allowance List as approved by CNO.

EOD MOBILE UNIT ALLOWANCE: Initial outfitting of tools/equipment for increased allowances on the CNO approved Allowance List.

VN079 - OIF RE-CONSTITUTION: Provides for OIF re-constitution of neutralization equipment.

VN080 - SELF CONTAINED BREATHING SYSTEM: Provides for the outfitting of a self contained breathing sytem used by EOD technicians.

VN830-PRODUCTION ENGINEERING: Review all technical data packages prior to procurement and provide procurement instruction to the procuring activity in support of the EOD unified procurement system. Provides production engineering support for all EOD and MMS production contracts.

VN850-PRODUCT IMPROVEMENT: Engineering services to improve EOD/MMS Systems/Equipment in production to improve maintainability, utilize current technology and decrease cost.

VN860-ACCEPTANCE, TEST & EVALUATION: Test, inspect, accept first articles and, on a 100% basis, the production quantity of EOD tools and equipment being procured. These tools are man-rated, and proper functioning of each item must be verified.

VNTNG-INITIAL TRAINING: Provide training support packages which include curriculum material for Joint Service EOD and Marine Mammal systems equipment.

P-1 SHOPPING LIST

CLASSIFICATION:

DD Form 2454, JUN 86 ITEM NO. 116 PAGE NO. 2

## **UNCLASSIFIED**

	WEAPONS SYSTEM COST P-5	ANAL	rsis			Weapon Sy	stem						DATE: February 2004
APPROP	RIATION/BUDGET ACTIVITY					ID Code	P-1 ITEM N	OMENCLATU	RE/SUBHEAD				February 2004
	rocurement, Navy/BA-4								,				
	•					Α		Explosive C	Ordnance Di	sposal Equ	uipment/74\	′N	
			TOTAL COST	IN THOUS	ANDS OF DO	LLARS							
COST	ELEMENT OF COST	ID	Prior		FY 2003			FY 2004			FY 2005		
CODE		Code	Years Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	<del></del>
	SPONSOR N75		Total Cool	Quantity	01111 0001	Total Cool	Quantity	OTHE COOL	Total Cost	Quantity	Offic Cook	10101 0001	
	Explosive Ordnance Disposal Eq (N75)												
VN075	EOD EQUIPMENT/SYSTEMS					<u>293</u>			<u>152</u>			<u>1,574</u>	
	RONS CIP	Α				293							
	LARGE IED ACCESS & DISRUPTION	В					54	3	152	108	3		
	NON-INVASIVE FILLER ID	В								5	150	750	
	EOD MTRS	В								5	100	500	
/N076	MARINE MAMMAL SYSTEMS/EQUIP.					2,241			2,999			2,074	
	MMS VSW MCM	Α				442			548			578	
	VSW ACCESSORY SET	Α		188	3	633	208	3	700	119	3	400	
	MMS ALOWANCE	Α				160			205			210	
	MK 8 MMS	Α				1,006							
	MMS MULTIPLE CAPABILITY								1,546			886	
N077	EOD OUTFITTING					3,176			<u>2,876</u>			19,445	
	MATERIAL FOR NAVSCOLEOD	Α				160			170			150	
	INITIAL OUTFIT DET NR	Α				353			347			350	
	EOD MU ALLOWANCE	Α				2,663			2,359			18,945	
N079	OIF RE-CONSTITUTION	Α							1,884				
N080	SELF CONTAINED BREATHING SYSTEM	Α							2,100				
N830	PRODUCTION ENGINEERING	Α				679			678			724	
N850	PRODUCT IMPROVEMENT	Α				615			700			701	
N860	ACCEPTANCE, TEST & EVALUATION	Α				320			340			340	
'NTNG	INITIAL TRAINING	Α				240			250			200	
		A											
	2446 II IN 96		0		D 1 CHODDIN	7,564			11,979			25,058	

DD FORM 2446, JUN 86

P-1 SHOPPING LIST ITEM NO. 116

CLASSIFICATION:

# **UNCLASSIFIED**

BUDGET PROCURE	MENT HIST	ORY AND	PLANNING EXHIBIT	Γ (P-5A)		Weapon System		A. DATE	February 20	04
B. APPROPRIATION/BUDGE Other Procurement, BA 4: ORDNANCE S	Navy	OUIPMEN	т		C. P-1 ITEM NOM	I IENCLATURE MENT/BLI #5509			_	VN
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FISCAL YEAR (03) VN076 VSW Accessory Set	188	3			WR	SSC, SAN DIEGO, CA	2/03	2/04	YES	
FISCAL YEAR (04) VN075 Large IED	54	3	NSWCIHD, IH, MD		FFP	TBD	3/04	1/05	YES	
VN076 VSW Accessory Set FISCAL YEAR (05)	208	3			WR	SSC, SAN DIEGO, CA	2/04	2/05	YES	
VN075 NFI MTRS Large IED VN076 VSW Accessory Set	5 5 108 119	150 100 3	NSWCIHD, IH, MD NSWCIHD, IH, MD NSWCIHD, IH, MD		C/FP-OPTION C/FP-OPTION FFP WR	TBD TBD TBD SSC, SAN DIEGO, CA	1/05 4/05 8/05	7/05 10/05 1/06 2/06	NO NO NO YES	11/04 2/05 7/05

D. REMARKS

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST Classification:

ITEM NO. 116 PAGE NO. 4 UNCLASSIFIED

		BUDGE	T ITEM JUS	TIFICATION	SHEET			DATE:			
			P-	40					FEBRU <i>A</i>	ARY 2004	
APPROPRIATION/BUD	GET ACTIVIT	Υ				P-1 ITEM NOM	IENCLATURE				
OTHER PROCURE	MENT, NA	/Y	BA 4: ORI	DNANCE SU	PPORT EQU		ITEMS LESS	S THAN \$5M	BLI 554	300 / 554305	
Program Element for Co	ode B Items:					Other Related I	Program Elemer	nts			
	Prior	ID								То	
	Years	Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Total
QUANTITY											
COST											
(In Millions)			\$3.3	\$4.7	\$4.0	\$4.1	\$4.2	\$4.5	\$4.6		\$29.4
SPARES COST											
(In Millions)											

PROGRAM DESCRIPTION/JUSTIFICATION: Program Support Requirements for minor NAVSEA under \$5M is for Budget Activity 4 as follows:

#### RA001; MK92/MK13 ORDALT Procurement:

Provides hardware and related materials to modify Fire Control System MK92 Mod 2/6 installed onboard 23 FFG 7 Class ships. Modifications correct safety, environmental, RM&A, cost of ownership and obsolescence deficiencies to maintain the readiness of the AAW/ASUW Weapons System mission for self and area defense against hostile air and surface threats, including anti-ship missile threats. Hardware is procured as Ordnance Alterations (ORDALTs). Installation of ORDALTs will be accomplished by either AIT (Alteration Installation Teams) or in conjunction with routine repair actions planned in the fiscal years following the procurement. \*\*MK13 Guided Missile Launching System support has been discontinued.

#### RA5IN: MK92/MK13 ORDALT Installation:

Provides funding to install procured MK92 ORDALTs into FFG 7 Class ships by AIT.

#### RA003; Industrial Facilities (Calibration Equipment):

Provides funding for capital type rehabilitation projects at five (5) government-owned, contractor- operated plants for weapon systems such as the MK 41 Vertical Launching System, MK 45 Gun Mounts, MK 13/26 Launching Systems, MK 13/26 Launching Systems, and PHALANX. Federal Acquisition Regulation Part 52.245-7 specifies facilities use contracts require government funding of capital type rehabilitation projects to support and maintain these facilities. These plants have an average age of 45 years and lack of proper maintenance will severely limit capabilities to maintain scheduled production rates and overall productivity. The following estimates support environmental, safety, energy conservation, and major repair at the GOCO facilities.

(Continued on next page)

P-1 SHOPPING LIST

ITEM NO. 117 PAGE NO. 1

CLASSIFICATION:

**UNCLASSIFIED** 

DD Form 2454, JUN 86

	BUDGET ITEM JUSTIFICATION SHEET		DATE:		
	P-40			FEBRUARY 2004	
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE			
OTHER PROCUREMENT, NAVY	<b>BA 4: ORDNANCE SUPPORT EQUIPMENT</b>	ITEMS LESS	S THAN \$5M	BLI 554300 / 554305	
Program Element for Code B Items:		Other Related Program Elemen	its		

#### RA004; Quality Evaluation Technologies and Equipment

Provides funding to procure test systems and equipment in support of the NAVY weapons systems and ordnance Quality Evaluation (QE) Program. The purpose of the Navy QE Program is to insure that only safe, quality, reliable, and ready Navy and Marine Corps weapons systems and ordnance items are provided to the Fleet. The results of the QE stock surveillance testing is technical readiness data used to predict when items degrade to the point where they become unsafe to store or would fail to function (unreliable) when needed and should be removed from service.

This generic (non-weapons systems specific) test equipment is needed to assess the effects of aging and exposure to environmental conditions on NAVY weapons systems and ordnance such as mines, gun ammunition, missiles, pyrotechnics, demolition systems/devices, bombs, and torpedoes throughout the in-service portion of their life cycle and will be located at NAVSEA engineering field activities. Requirements for the test equipment come from a need to replace or modernize obsolete or economically non-repairable equipment or to acquire new or expanded generic test capabilities when new evaluation techniques or process are needed. The equipments procured by these funds are generally "one of a kind" and are used to support generic NAVY weapons systems and ordnance types.

Weapons systems specific equipment is procured/funded via the individual weapons system Program Management offices. After the weapon specific equipment has entered the inventory, these funds adapt the capability, if feasible, to become more generic and support more than one weapon system. This reduces the overall economic burden to the NAVY.

#### **RA005 Fleet Mine Support Equipment:**

The Fleet Mine Support program provides for procurement of material and production support for readiness of all mines in stockpile. This includes both the service mine program and the Mine Exercise and Training (MET) Program in accordance with OPNAVNOTE C8550. Funds will provide the following: (A) Procurement of mine materials to replace expended components used during the MET program for delivery proficiency. (B) Procurement of mine materials to replace expended components used during the MET program for Mine Countermeasures (MCM) proficiency. (C) Procurement of components to improve mine operational characteristics and capabilities, such as upgraded processors for compatibility with current and projected technology. (D) Procurement of new MET shapes for MCM proficiency.

#### RA830; Fleet Mine Support Production Engineering:

Funds will provide production engineering support for mine assembly and loading, proof and test of mine components delivered from procurement. Certification of specialization/documentation relating to mine material to be procured, engineering and quality assurance services in support of mine material procurements and publications in support of component assembly and test for service and MET program.

P-1 SHOPPING LIST

ITEM NO. 117 PAGE NO. 2

CLASSIFICATION:

**UNCLASSIFIED** 

DD Form 2454, JUN 86

**UNCLASSIFIED** CLASSIFICATION:

	WEAPONS SYSTEM COST ANAL P-5	LYSIS		Weapon Sy	rstem							DATE: FEBRUA	RY 2004
	PRIATION/BUDGET ACTIVITY Procurement, Navy		TEMS LE	ID Code SS THAN	\$5M	BLI 55430	0 / 554305						
			TOTAL COS	T IN THOUSA	NDS OF DO	LLARS							
COST	ELEMENT OF COST	ID Carla	Prior			FY 2003			FY 2004			FY 2005	
CODE		Code	Years Total Cost		Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Co
A001	FLT SUPPORT ORDALTS(MK92/MK13)	A					0	12	77	924	12	65	7:
RA002	FMP Installation						98			100		00	
RA003	INDUST. FACILITIES (CALIB. EQUIP)						968			1,115			9:
RA004	QUALITY EVAL TECH & EQUIPMENT						1,454			1,674			1,4
	FLEET MINE SUPPORT EQUIPMENT												
RA005	Mine System Support  Production Engineering	Α					733			676			7
	M 2446, JUN 86		0 OPPING LIST		)		3,253 CLASSIFICA			4,689 CLASSIFICA			4,

P-1 SHOPPING LIST PAGE NO. 3 ITEM NO. 117

# **UNCLASSIFIED**

BUDGET PROCUREME	NT HISTORY	AND PLA	ANNING EXHIBIT (F	P-5A)		Weapon System		A. DATE	EBRUARY 2	2004
B. APPROPRIATION/BUDGET A Other Procurement, Na					C. P-1 ITEM NON	I MENCLATURE ITEMS LESS THAN \$5	M		SUBHEAD	RA
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FISCAL YEAR 2003										
RA005 - FLT Mine Spt Eq	VAR	VAR	VAR	VAR	VAR	VAR	VAR	VAR	YES	
FISCAL YEAR 2004										
RA005 - Flt Mine Spt Eq	VAR	VAR	VAR	VAR	VAR	VAR	VAR	VAR	YES	
RA001 - MK92 O/A	12	77.0	NSWC/PHD	12/3	CPFF	LOCKHEED/NJ	4/04	4/05	NO	
FISCAL YEAR 2005										
RA005 - Flt Mine Spt Eq	VAR	VAR	VAR	VAR	VAR	VAR	VAR	VAR	YES	
RA001 - MK92 O/A	12	65	NSWC/PHD	VAR	CPFF	LOCKHEED/NJ	VAR	VAR	NO	

D. REMARKS

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST ITEM NO. 117 Classification:

PAGE NO. 4 UNCLASSIFIED

	BUDG	ET ITEM JUS	TIFICATION SHE	ET					DATE:		
		P-	40						<b>FEBRUAR</b>	Y 2004	
APPROPRIATION/BUDGE OTHER PROCUREME	-					P-1 ITEM NO	MENCLATURE	LINE ITEM #			
BA 4 - ORDNANCE S	UPPORT EQUIP	MENT					ANTI-SHIP	MISSILE D	ECOY SYS	TEMS/5530	
Program Element for Cod	le B Items:	060475	7N, Project Number:	U2190/K2190	/K2441	OTHER RELA	TED PROGRA	M ELEMENTS N/A	3		
	FY 2002 & Prior	ID Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
QUANTITY	42		12	12	12	12	11	10	8	0	119
EQUIPMENT COST (In Millions)	\$151.8	A	32.3	49.9	46.6	41.6	58.1	59.3	60.8	228.9	729.2
SPARES COST (In Millions)	1.1										

#### PROGRAM DESCRIPTION/JUSTIFICATION:

JUSTIFICATION: The Anti-Ship Missile Decoy Program covers a family of decoys and the equipment to deploy them. It is an essential element of the Anti-Ship Missile Defense tactics to counter the threat of enemy homing missiles. Nulka is a joint program with Australia, and is currently in service with the Australian, Canadian, and United States Navies. Nulka underwent successful TECHEVAL and OPEVAL in July/August 1998 with a full production decision received in January 1999. This line contains various equipment and subsystems for a system which will provide the capability to defeat the effectiveness of hostile Anti-Ship cruise missiles. Currently Nulka is scheduled to be installed on the following ship classes: DDG 51, CG 47, FFG-7, LSD 41, LPD 17, and DDX. The installation will be performed during a limited availability by shipalt/Alteration Installation Team (AIT).

EQUIPMENT INSTALLATION: Funding is for the installation of equipment, including Fleet Modernization Program Installs, and installation of equipment at shore facilities

NOTE: No ERF, D funding

P-1 SHOPPING LIST

ITEM NO. 118 PAGE NO. 1

CLASSIFICATION:

**UNCLASSIFIED** 

DD Form 2454, JUN 86

	WEAPONS SYSTEM C P-5	OST AN	IALYSIS			Weapon S	ystem						DATE: <b>FEBRU</b>	ARY 2004	
Other Pi	RIATION/BUDGET ACTIVITY Cocurement, Navy					ID Code		IOMENCLATUI						SUBHEAD	
BA-4: C	RDNANCE SUPPORT EQUIPMENT							ANTI-SHIP	MISSILE D	ECOY SY	STEMS B	LI: 55300			A4VV
			TOTAL COS	T IN THOUS	ANDS OF DO	LLARS									
COST CODE	ELEMENT OF COST	ID Code						FY 2003			FY 2004			FY 2005	
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	RESOURCE SPONSOR: N76														
	EQUIPMENT														
VV001	NULKA SYSTEMS	А					12	267	3,204	12	266	3,192	12	270	3,240
VV002	NULKA DECOYS	А					36	463	16,668	97	279	27,063	71	340	24,140
VV003	Engineering Changes and Logistics Suppt								4,993			10,110			9,743
	EMC ORDALT Kits						10	30	(300)	158	37	(5,846)	137	39	` '
	Engineering Changes								(1,265)			(1,248)			(1,336
	FFG Non-Recurring								(1,012)						
	Logistics Support								(2,416)			(3,016)			(3,064)
VV830	Production Engineering								1,500			1,500			1,500
VVINS	Installation (FMP)								5,892			8,019			7,930
	2446, JUN 86		OPPING LIST		118	PAGE NO.	2		32,257			49,884 CLASSIFICA			46,553

DD Form 2446-1, JUL 87

BUDGET PROCUE	REMEN	NT HIST	ORY AND PLAN	NING EXHIB	IT (P-5A)	Weapon System			FEBRUARY	2004
B. APPROPRIAT OTHER PROCUREMENT BA-4 - ORDNANCE SUP	Γ, NAVY					M NOMENCLATURE SSILE DECOY LAUNCH		EM	SUBHEAD A4	vv
Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FISCAL YEAR 03 VV001 (Systems)	12	267	NAVSEA		FP	Sechan Electronics Inc.	1/03	2/04	YES	
VV002 (Decoys)	36	463	DCMA Pacific		FP	BAeS, Australia	2/03	2/04	YES	
FISCAL YEAR 04 VV001 (Systems)	12	266	NAVSEA		FP	Sechan Electronics Inc.	1/04	2/05	YES	
VV002 (Decoys)	36	279	DCMA Pacific		FP	BAeS, Australia	2/04	2/05	YES	
FISCAL YEAR 05 VV001 (Systems)	12	270	NAVSEA		FP	Competitive	1/05	2/06	YES	
VV002 (Decoys)	97	340	DCMA Pacific		FP	BAeS, Australia	2/05	2/06	YES	
D. REMARKS										

P-1 SHOPPING LIST 118 PAGE NO. 3 CLASSIFICATION:

CLASSIFICATION: UNCLASSIFIED	)																	FEBR	JAR	Y 2004	,	
РЗА		INDIVID	UAL I	MODIFIC	ATIO	N												•				
MODELS OF SYSTEM AFFECTED:	None - O	riginal Ins	tallatio	ns	TYPE	E MODIFI	CATIO	ON:						MODIFI	CATIC	ON TITL	E:				NULKA	
DESCRIPTION/JUSTIFICATION:																						
Launching system modifications to support N	ULKA De	ecoy.																				
DEVELOPMENT STATUS/MAJOR DEVELO			ONES																			
	and Price QTY		<u>F\</u> QTY	<u>/ 2002</u> \$	<u>F`</u> QTY	<u>/ 2003</u> \$	<u>F\</u> QTY	<u>′ 2004</u> \$	<u>FY</u> QTY	2005 \$	<u>FY</u> QTY	<u>2006</u>	<u>FY</u> QTY	<u>′ 2007</u> \$	<u>FY</u> QTY	2008 \$	<u>FY</u> QTY	<u>′ 2009</u> \$	QTY	<u>TC</u> \$	TC QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)																						-
RDT&E	3/58	134.3			0	5.4	0	7.1	0	2.5	0	1.0	0	1.0	0	1.1	0	1.0	0	0.9	3/58	154.3
<u>PROCUREMENT</u>																						ļ
INSTALLATION KITS	41	17.6			12	3.2	12	3.2	12	3.2	12	3.4	11	3.2	10	3.0	8	2.6	0		118	39.02
INSTALLATION KITS NONRECURRING																						0.0
SCN MK 53 DLS**	11	10.4			4	4.9	3	3.8	3	3.8	4	5.3	3	3.9								**
EQUIPMENT NONRECURRING		0.6				1.0																1.6
ENGINEERING CHANGES		6.5				1.3		1.2		1.3		1.2		1.3		1.4		1.4		TBD		17.0
EMC ORDALT KITS					10	0.3	158	5.8	137	5.3											305	11.5
UNIT COST DATA FOR EQUIPMENT																						0.0
TRAINING EQUIPMENT*	1	0.97																			1	0.97
SUPPORT EQUIPMENT OTHER (DECOYS) w/Plus-up on BLI 5239																						0.0
(\$2M for EMC/\$3M for 8 rounds)***																						}
OTHER (DECOYS)***	271	69.1			42	16.7	97	27.1	71	24.1	71	24.1	75	40.9	80	43.2	86	46.0	379	221.7	1200	526.8
LOGISTICS SUPPORT		11.0				2.4		3.0		3.1		2.5		2.7		2.7		2.5		TBD		33.3
PRODUCTION ENGINEERING		6.5				1.5		1.5		1.5		1.5		1.5		1.5		1.5		TBD		18.5
INTERIM CONTRACTOR SUPPORT																						<u> </u>
PROCUREMENT COST	312	111.7			54	26.4	109	41.9	83	38.6	83	32.7	86	49.6	90	51.8	94	54.0	379	221.7	1319	648.7
INSTALL COST	19	15.1			8	5.9	12	8.0	12	7.9	12	8.9	11	8.6	10	7.5	8	6.8	20	7.2	119	81.3

TOTAL PROGRAM

124.8

P-1 SHOPPING LIST PAGE NO. 4

49.9

46.6

41.6

58.1

CLASSIFICATION:

60.8

59.3

**UNCLASSIFIED** 

729.2

228.9

32.3

<sup>\*</sup> Qty (1) trainer procurement with install cost included.

<sup>\*\*</sup>SCN is provided for information purposes only - \$\$ are not included in totals

<sup>\*\*\*</sup>Total Quantity Decoys procured in FY02 is 42. (Qty 34 on BLI 5530, and qty 8 procured on BLI 5239 w/plus-up \$\$).

CLASSIFICATION: UNCLASSIFIED **FEBRUARY 2004** P3A (Continued) INDIVIDUAL MODIFICATION (Continued) MODELS OF SYSTEMS AFFECTED: None. Original Installations MODIFICATION TITLE: NULKA INSTALLATION INFORMATION: METHOD OF IMPLEMENTATION: SHIPALT/AIT ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 14/12 Months CONTRACT DATES: FY 2002: January 2002 FY 2003: January 2003 FY 2004: January 2004 FY 2005: January 2005 DELIVERY DATE: FY 2003: February 2004 FY 2004: February 2005 FY 2005: FY 2002: February 2003 February 2006 (\$ in Millions) Cost: FY 2002 and Prior FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 To Complete Total Qty \$ \$ Qty Qty Qty Qty PRIOR YEARS FY 2001 AND PRIOR 26 20.50 4.34 34 24.84 FY 2002 EQUIPMENT 1.32 4.25 5.57 FY 2003 EQUIPMENT 0.23 4.40 3.42 12 11.90 FY 2004 EQUIPMENT 0.33 3.10 4.85 8.28 12 FY 2005 EQUIPMENT 0.40 3.38 4.37 12 3.78 FY 2006 EQUIPMENT 0.64 3.58 3.60 1.20 12 9.02 FY 2007 EQUIPMENT 0.60 3.30 2.50 11 6.40 FY 2008 EQUIPMENT 0.60 2.40 4.20 10 7.20 FY 2009 EQUIPMENT 0.70 2.68 3.38 TO COMPLETE \*\* 0.32 119 0.00 INSTALLATION SCHEDULE: SHIP AVAILABILITIES FY2002 TC TOTAL FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 \_3 AND PRIOR 3 2 3 3 3 2 2 3 2 2 2 2 16 IN 26 1 3 2 4 5 4 4 4 3 119 OUT 25 3 2 2 3 3 18 119

FY 2002/03 BUDGET PRODUCT			DUL	E, P-2	1													DAT	Έ		FE	BR	UAI	RY:	<u> 200</u>	4				
APPROPRIATION/BUDGET ACT OTHER PROCUREMENT, NAVY			DNA	ICE S	UPPC	ORT I	EQU	IPME	ENT			,	Wea	pon	•	tem			/	ANTI	OME -SHIF					SYST	EMS/	/A4V\	/	
							Pro	duct	ion F	Rate					Pro	cure	men	t Le	adtir	nes										
		Man	ufactu	ırer's									T Pr		AL	T Aft	er		nitia			eord						Uni	it of	
Item			and L		n	MS	SR	1-8	3-5	MA	١X	to	Oct	1	(	Oct 1		Mf	g Pl	_T	Mf	fg P	LT		Tota	ıl		Mea	sure	е
MK 53 DECOY LAUNCH SYSTEM		Sippi	can, N	1ASS		9				18	3					6			14			12								
MK 53 DECOY LAUNCH SYSTEM		Sech	an, P	4		9				18	3					6			14			14								
MK 234 NULKA ELECTRONIC DECOY		BAeS	S, Aus	tralia		66	6			192	2					6			12			12								_
																														_
			_	_																		FISC		EAR :						-
ITEM / MANUFACTURER	F	S	Q	D	В		, ,		<b>.</b>	-					-	-			2002				1	LEND		EAR 2	003			┨ _
	Υ	V C	T Y	E L	A L													O C	N O	D E	J A	F E	M A	A P	M A	J	J	A U	S E	A
																		T	V	C	N	В	R	R	Y	N	Ĺ	Ğ	P	-
MK 53 DECOY LAUNCH SYSTEMS	01		8	0	8																									0
MK 53 DLS (SCN)	01		3	0	3													1	1											0
MK 53 DECOY LAUNCH SYSTEMS	02		8	0	8																1	1	1	1	1	1	1	1		0
MK 53 DLS (SCN)	02		4	0	4																								1	3
MK 53 DECOY LAUNCH SYSTEMS	03		12	0	12																Α									12
MK 53 DLS (SCN)	03		4	0	4																Α									3
MK 234 NULKA ELEC. DECOY (U.S.)	01		95	0	95													5	4	5	4	5	4	5	4	5				0
MK 234 NULKA ELEC. DECOY (U.S.)	02		34	0	34													_									6	5	6	17
MK 234 NULKA ELEC. DECOY (U.S.)	03		42	0	42																	Α								42
										FISCA	U VE	\P 20	04				-					EIS	- AL V	EAR :	2005					┿
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	Υ	V	Т	Е	Α	0	N	D	J	F	М	Α	М	J	J	Α	s	0	N	D	J	F	М	Α	М	J	J	Α	S	В
		С	Υ	L	L	C T	O V	E	A N	E B	Α	P R	A Y	U N	U	U G	E P	C T	O V	E C	A N	E B	A R	P R	A	U	U	U	E	A L
						-	V	C	IN	В	R	ĸ	Y	IN	L	G	Р	1	٧	C	IN	В	ĸ	ĸ	Y	N	_	G	Р	0
MK 53 DLS (SCN)	02		4	1	3	1	1	1																						0
MK 53 DECOY LAUNCH SYSTEMS	03		12	0	12					1	2	1	2	1	2	1	2													0
MK 53 DLS (SCN)	03		4	0	4													1	1	1										0
MK 53 DECOY LAUNCH SYSTEMS	04		12	0	12				Α								ı					1	1	1	1	1	1	1	1	4
MK 53 DLS (SCN)	04		3	0	3				Α																					3
MK 53 DECOY LÁUNCH SYSTEMS	05		12	0	12												ĺ				Α									12
MK 53 DLS (SCN)	05		3	0	3																Α									3
MK 234 NULKA ELEC. DECOY (U.S.)	02		34	0	34	4	4	4	3	2							-1													0
MK 234 NULKA ELEC. DECOY (U.S.)	03		42	0	42						4	4	4	4	4	4	4	4	4	4	2									0
MK 234 NULKA ELEC. DECOY (U.S.)	04		86	0	86					Α							ļ					8	8	8	8	8	8	8	8	22
MK 234 NULKA ELEC. DECOY (U.S.)	05		71	0	71																	A								71

Remarks: Decoy Production rates are based on a combined United States, Australia and Canada production schedule. Australia and Canada are not buying US Ship system. Presently no other countries are buying this system or decoy. Total qty decoys procured in FY 02 is 42. (Qty 34 in BLI 5530, and qty 8 in BLI 5239 w/plus-up dollars).

 DD Form 2445, JUL 87
 P-1 SHOPPING LIST
 PAGE

 311/244
 118
 6
 Exhibit P-21 Production Schedule

FY 1998/99 BUDGET PRODUCT			DULE	=, P-2°	1													DA	ГΕ		FE	BR	UA	RY	20	04					
APPROPRIATION/BUDGET ACT OTHER PROCUREMENT, I													Wea	apon	•					A٨		ENC HIP N				DY S	3YS	TEM	1S/A4	VV	
							Proc	<u>Jucti</u>	on F	Rate								nt Le	adtir	nes		_									
Item			nufactu and L		on .	MS	SR	1-8	3-5	MA	١X		T Pr Oct			T A			nitia fg Pl			eord Ifg P			Tot	tal			Uni Mea		
MK 53 DECOY LAUNCH SYSTEM			an, P			9				18		<u> </u>				6			14			14		$\dagger$			十		****		
MK 234 NULKA ELECTRONIC DECOY			S, Aust			66			□	192						6			12			12		t		_	コ	_	_	_	
						<del>                                     </del>	$\dashv$		$\dashv$	<del>                                     </del>		<del>                                     </del>									}			+		—	+				
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	Y	V C	T Y	E L	A L	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	JUN	J U	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R		U		J U L	A U G	S E P	B A L
MK 53 DECOY LAUNCH SYSTEMS	04		12	0	12	2	2	一														+	_	十	$\top$	+	十	$\overline{}$		-	0
MK 53 DLS (SCN)	04		3	0	3			2	1																						0
MK 53 DECOY LAUNCH SYSTEMS	05		12	0	12					1	2	1	2	1	2	1	2														0
MK 53 DLS (SCN)	05		3	0	3			$\dashv$		$\vdash$	$\vdash$	_	$\vdash$					1	1	1		$\vdash$	$\vdash$	╀	+	+	+	$\dashv$		_ <b></b> /	0
								1														#	1	l	+	#	4				
MK 234 NULKA ELEC. DECOY (U.S.)	04		86	0	86	8	8	6	=													+	+	1	+	+	+	$\rightarrow$		,— <b>/</b>	0
MK 234 NULKA ELEC. DECOY (U.S.)	05		71	0	71					6	6	6	6	6	6	6	6	6	6	6	5	$\perp$		1	#	丰	#		=	口	0
																						$\perp$		$oldsymbol{\perp}$	$\pm$	$\pm$	1	$\equiv$			
				<b> </b>						FISC	AL VE	AR 20	000									EIS	CAL Y	VEAG	2000	$\perp$					
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	Y	У С	T Y	E L	A L	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P	M A	1 J	J	J U L	A U G	S E P	B A L
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												$\vdash$										+	-	╁	+	+	-	$\rightarrow$			$\vdash$
																								1_	1	工	工				
Remarks: Decoy Production rates are b	ວased c	on a cor	mbined	United	States,	Austra	alia ar	nd Ca	ınada	a prodi	uctior	n sche	edule.	Aus	stralia	and	Cana	ada ar	e not	buyi	ng th	e US	Ship	) sys	æm.	Pres	senf	dy nc	ے oth	∍r	

countries are buying this system or decoy. Total qty decoys procured in FY 02 is 42. (Qty 34 in BLI 5530, and qty 8 in BLI 5239 w/plus-up dollars).

DD Form 2445, JUL 87 P-1 SHOPPING LIST PAGE

## **UNCLASSIFIED**

			BUDGET IT	EM JUSTIFICA		Т			DATE:			
				P-	40					FI	EBRUARY 20	004
APPROPRIATION/BU	JDGET ACTIVIT	Υ					P-1 ITEM NOM	IENCLATURE				
OTHER PROCUR	EMENT, NA	VY	BA-4 ORD	NANCE SUPP	ORT EQUIPM	<b>MENT</b>	SURFACE	TRAINING D	EVICE MODIF	ICATIONS B	LI; 566000 SI	BHD; 84TS
Program Element for	Code B Items:						Other Related I	Program Elemei	nts			
	Prior	ID									То	
	Years	Code		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Total
QUANTITY												
COST												
(In Millions)	\$31.6			6.4	7.3	6.3	10.6	11.1	10.8	10.7		94.7
SPARES COST												
(In Millions)				0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.6

(566000) This line provides funds to modify/upgrade training devices to maintain systems at Fleet configuration and to enhance training capability.

(TS004) SURFACE TRAINING DEVICE MODS Provides funding for surface warfare minor modifications. These modifications are improvements/upgrades to in-service surface training systems identified by the program offices and training activities, and are approved by the Resource Sponsor. Modifications are required to meet safety standards, keep training systems compatible with equivalent changes made to fleet operational equipment, and to enhance training capabilities. These modifications support the 300+ fielded Surface training systems and their concurrency with fleet operational configuration.

o Funding is provided annually for modifications to the Device S14A13 Tactical Advanced Simulated Warfare Integrated Trainer (TASWIT) - applicable to the Multi-Mission Team Trainer (MMTT). o Funds are provided for procurement and installation of one modular Firefighting Trainer (FFT) at PACNORWEST in FY04 and also funds the Service Life Extension (SLEP) of one FFT per year in FY05-09.

(TS007) MULTI-MISSION TEAM TRAINER (MMTT) Funding consolidates the software functionality of the Device S14A13 TASWIT and the Device 20F15 TACDEW Scenario Generation and Control (SG&C) subsystem. The TASWIT rehost is MMTT Phase 1 and is located at SWOS Newport, Fleet ASW Training Center, San Diego, and Fleet Training Center Norfolk. The TACDEW SG&C rehost is MMTT Phase 2 and is located at the Fleet Combat Training Centers (FCTCLANT and FCTCPAC).

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 119 PAGE NO. 1

**UNCLASSIFIED** 

DD Form 2454, JUN 86

ITEM NO.

119

	WEAPONS SYSTEM P-5		NALYSIS			Weapon Sy	/stem							DATE: <b>FEBRU</b> A	RY 2004
Other P	PRIATION/BUDGET ACTIVITY rocurement, Navy PRDNANCE SUPPORT EQUIPMENT	-				ID Code		E TRAINING			ATION RI I-	566000 SE	RHD-84TS		
JA 4. U	NONANOE GOTT GIVE EQUIT MENT		TOTAL COS	T IN THOUS	SANDS OF DO	LLARS	OUNI AU	<u> </u>	O DEVICE	WODII 107	ATION DEL	300000 02	JIID.0410	'	
COST	ELEMENT OF COST	ID Code	Prior Years					FY 2003			FY 2004			FY 2005	
CODE		Code	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cos
	SURFACE MODS (N75/N76)														
TS004	SURFACE TRAINING DEVICE MODS														
	Surface Minor Mods (N75)		922						233			1,482			1,356
	Surface Minor Mods (N76)		24,898						4,232			4,141			3,756
	FFT/SLEP/Modular Trainer (N76)		0						0			1,375			922
TS007	MULTI-MISSION TEAM TRAINER (MMTT) (N76)		5,746				1	1,890	1,890	1	300	300	1	313	31
	SUBTOTAL (N75)		922						233			1,482			1,35
	SUBTOTAL (N76)		30,644						6,122			5,816			4,99
			31,566						6,355			7,298			6,34
D FORM	1 2446, JUN 86	P-1 SH	OPPING LIST		•	•	•					CLASSIFICA			

PAGE NO.

**UNCLASSIFIED** 

<b>BUDGET PROCURE</b>	MENT HISTO	ORY AND I	PLANNING EXHIBIT	Г (P-5A)		Weapon System		A. DATE		
									<b>FEBRUA</b>	<b>RY 2004</b>
B. APPROPRIATION/BUDGE					C. P-1 ITEM NOM	IENCLATURE			SUBHEAD	
Other Procurement,					SURFACE TRAI	NING DEVICE MODIFICATION	ONS			
BA-4: ORDNANCE	SUPPORT	EQUIPM	ENT		BLI: 566000	1	1	L DATE OF	SBHD:84T	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
TS004-FY-03-05	Var	TBD	NAWCTSD Orlando, FL	Various	Various	Various	Various	Various	Yes	N/A
TS007 - FY03 MMTT TS007 - FY04 MMTT	1	1,890 300	GOVWORKS GOVWORKS	Various Various	Various Various	Various Various	Various Various		YES YES	N/A N/A
TS007 - FY05 MMTT	1	313	GOVWORKS	Various	Various	Various	Various	03/05	YES	N/A
D. REMARKS										

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST ITEM NO. 119 Classification:

PAGE NO.3

	SIMULATO	OR AND TRAINI	NG DEVICE	<b>JUSTIFICA</b>	TION (\$000)		Date			,
Appropriation	on P-1 Line Item	Weapon System (i	if applicable)		Equipment No	menclature			FEBRUARY 2004	
	566000				Surface Trail	ning Device N	<b>Modifications</b>	0804731N		
Fin Plan	Prior Years		FY03	FY04	FY05	FY06	FY07	FY08	FY09	TOTAL
Quantity	VAR		VAR	VAR	VAR	VAR	VAR	VAR	VAR	VAR
Proc	\$31,566		\$6,355	\$7,298	\$6,347	\$10,558	\$11,100	\$10,751	\$10,729	\$94,704
RDT&E										
O&S										

(L/I 566000) This line provides funds to modify/upgrade training devices to maintain systems at Fleet configuration and to enhance training capability.

(TS004) SURFACE TRAINING DEVICE MODS Provides funds for surface warfare minor modifications. These modifications are improvements/upgrades to in-service surface training systems identified by the program offices and training activities, and are approved by the Resource Sponsor. Modifications are required to meet safety standards, keep training systems compatible with equivalent changes made to fleet operational equipment, and to enhance training capabilities. These modifications support the 300+ fielded Surface training systems and their concurrency with fleet operational configuration.

(TS007) MULTI-MISSION TEAM TRAINER (MMTT) Funding consolidates the software functionality of the Device S14A13 TASWIT and the Device 20F15 TACDEW Scenario Generation and Control (SG&C) subsystem. The TASWIT rehost is MMTT Phase 1 and is located at SWOS Newport, Fleet ASW Training Center, San Diego, and Fleet Training Center Norfolk. The TACDEW SG&C rehost is MMTT Phase 2 and is located at the Fleet Combat Training Centers (FCTCLANT and FCTCPAC).

EXHIBIT 43A
P-43 Simulator & Training Device Justification

ITEM 119 PAGE NO. 4 Classification: UNCLASSIFIED

EXHIBIT P-43			DE\#0E		\ <del>-</del> 10					DATE:																
	OR AND TRA ation/P-1 Line		DEVICE	JUSTIFIC	AHC	אכ				FEB 04										IOC Date						
			<b></b>	<b>D</b>	N#1:	· · · · · · · · · · · · · · · · · · ·														IOC Date	;					
Training	urement Nav	/y/Surra	Ready for		Woal	fication	1				l															
Device		Deliver	Training	Student	Pric	or Years			ΕV	2003	FY	2004	F١	2005	E/	Y 2006	FΥ	2007	F.	Y 2008	FΥ	2009	To C	omplete	т	otal
by Type	Site	Date	Date	Throughput			Qty	Cost		Cost		Cost	Qty	Cost	Qty		Qty	Cost	Qty			Cost		Cost		Cost
ву турс	Oile	Date	Date	Triiougriput	Qty	0031	Qty	0031	Qty	0031	Qty	0031	Qty	0031	Qty	0031	Qty	0031	Qty	0031	Qty	0031	Qty	0031	Qty	0031
TS001 CARR	Y-ON COMBA	AT SYST	EMS TRAI	NER (COC	ST)																					
COCST	First Unit	01/00		N/A	3	7,722																			3	7,722
	Second Unit 1/2		09/00	N/A		,																				,
	Second Unit 1/2		09/00	N/A																						
	Third Unit 1/2	10/00	01/01	N/A																						
	Third Unit 1/2	10/00	01/01	N/A																						
TS004 SURF	ACE TRAININ	IG DEVI	CE MODS																							
VAR			VAR	N/A	VAR	16,428			VAR	4,465	VAR	6,998	VAR	6,034											VAR	33,925
TS005 BATT	LE FORCE EL	ECTRO	NIC WARF	ARE TRAIN	IER																					
BEWT	VAR			N/A	10	1,000																			10	1,000
			1																							
TS006 BFTT	HIGH LEVEL	ARCHIT	ECTURE (																							
		J	ļ	N/A	36	2,500																			36	2,500
TS007 MULT	I-MISSION TE	EAM TRA	INER (MM																							
				N/A	2	3,916			1	1,890	1	300	1	313											5	6,419
Tatal						04.500				0.055		7 000		0.047	0		0	0				0			- 4	54 500
Total					51	31,566			1	6,355	1	7,298	1	6,347	0	0	0	0		0		0			54	51,566
Description			1	I																						
Pescubuon																										

## **UNCLASSIFIED**

		В	<b>UDGET ITE</b>	M JUSTIFICA	ATION SHEE	T			DATE:			
				P-40						<b>FEBRUARY</b>	2004	
APPROPRIATION/BUD	OGET ACTIV	ITY					P-1 ITEM NON	MENCLATURE				
OTHER PROCURE	MENT, NA	VY/BA-	4				SUBM	ARINE TRAI	NING DEVIC	E MODS/BLI	: 5661/SBHD	): 84TD
Program Element for C	ode B Items:						OTHER RELA	TED PROGRAI	M ELEMENTS			
	Prior	ID									То	
	Years	Code	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Total
QUANTITY												
EQUIPMENT COST												
(In Millions)				\$18.7	\$27.4	\$39.4	\$32.8	\$21.9	\$20.5	\$20.7		\$181.4
SPARES COST												
(In Millions)												

PROGRAM DESCRIPTION/JUSTIFICATION:

#### (L/I 5661)

This line provides funds to modify/upgrade training devices to keep them compatible with equivalent changes made to Fleet operational equipment and to enhance trainer systems capabilities.

#### (TD002) SUBMARINE TRAINING DEVICE MODS

Provides funding for modifications which are upgrades to submarine training systems which are centrally managed systems. These improvements/upgrades are required to keep training systems compatible with equivalent changes made to fleet operational equipment and to change trainer capabilities to meet emergent training requirements.

#### (TD003) SUBMARINE MULTI-MISSION TEAM TRAINER/COMBAT CONTROL SYSTEM (SMMTT/CC)

To achieve desired submarine force readiness levels, it is necessary to construct highly sophisticated shorebased trainers capable of training submarine combat system team personnel in all aspects of submarine search, detect, classify, attack and surveillance operations in a controlled, simulated environment.

The Combat Control System (CCS) MK 1 and CCS MK 2 are installed, on SSN and SSBN/SSGN Class submarines.

The CCS MK2 tactical program was upgraded to include CCS MK2 Block 1 C and has been upgraded to ECP4. This includes Combat Display Console (CDC) color/landscape, CPU parallel processor removal, AN/UYK-44 removal, Mk 23 Graphic Plotter OER, additional ADCAP upgrades, and FTAG (Fleet Tactical Advisory Group) improvements. CCS MK 2 Block 1 also introduces the Advanced Tomahawk Weapon Control System (ATWCS), and Tactical Tomahawk Weapons Control System (TTWCS), NTCS-A and Tomahawk Block Improvement Program (TBIP) which consists of Tomahawk Weapon improvements.

P-1 SHOPPING LIST

CLASSIFICATION:

DD Form 2454, JUN 86 ITEM NO.120 PAGE NO. 1

## **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET	DATE:
P-40	FEBRUARY 2004
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE
OTHER PROCUREMENT, NAVY/BA-4	SUBMARINE TRAINING DEVICE MODS/BLI: 5661/SBHD: 84TD
Program Element for Code B Items:	OTHER RELATED PROGRAM ELEMENTS

#### **TD003 Continued**

The Submarine Multi Mission Team Trainer (SMMTT) Phases 1, 2 program replaced the proprietary mainframe computer system by re-hosting functions on industry standard Local Area Network (LAN) workstations. The mainframes could no longer be upgraded due to service life. The SMMTT modification applies to both the CCS trainers and the acoustic trainers. SMMTT Phase 1 provided partial offload of the trainer-unique-equipment (TUE) software and provides additional processing power through the use of independent workstations. SMMTT Phase 2 completes the trainer-unique software offload and enables further enhancements. Modifies functionality of the Submarine Tactical Visual Training System (STVTS) to provide common imaging training for CCS trainers.

FY03 Procured 3 items: Upgrades to support the Rapid COTS Insertion (RCI) system to the SMMTT, one SMMTT upgrade kit to support CCS MK2 training; STVTS upgrades at the EPM.

#### (TD005) SUBMARINE MULTI-MISSION TEAM TRAINER /ACOUSTIC (SMMTT/A)

The AN/BQQ-5 Series Sonar Systems are installed aboard SSN/SSBN Class submarines. The Submarine Acoustic Trainers, simulate the digital data processing and graphic displays of the associated tactical system. The Tactical Acoustic Rapid COTS (commercial-off-the-shelf) Insertion (ARCI) Phased upgrades impact the AN/BQQ5E(V) systems. The Advanced Processing Builds (APB) impact the acoustic trainers. The SMMTT upgrades will be applied to selected acoustic, team trainers.

The SMMTT acoustic modifications support training for enlisted and officer pipelines. The SMMTT provides individual operators and combat teams the opportunity to train ashore, prior to, and between deployments. The shore based training provides a means of developing and maintaining team proficiency in stand alone or in combined team mode when tied to Combat System Team Trainers.

FY03 Procured 2 items: One SMMTT trainer kit to support ARCI-III: modifies the SMMTT Acoustic EPM to support the most recent APB in the SMMTT architecture.

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO 120 PAGE NO. 2

## **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET	DATE:
P-40	FEBRUARY 2004
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE
OTHER PROCUREMENT, NAVY/BA-4	SUBMARINE TRAINING DEVICE MODS/BLI: 5661/SBHD: 84TD
Program Element for Code B Items:	OTHER RELATED PROGRAM ELEMENTS

#### (TD006) SUBMARINE COMMON BASIC OPERATOR TRAINER (CBOT)/COMMON OPERATIONAL ANALYSIS AND EMPLOYMENT TRAINER (COAET)

The purpose of these devices is to provide pipeline training to submarine force personnel who require basic and advanced operator training to establish their required level of operator competence. These devices train individual operators on the CCS MK 1/ MK 2, and AN/BSY-1 by supplementing classroom instructions with dynamic training exercises. Through the use of these training devices, the student obtains direct, interactive experience in Command, Weapon, Target Motion Analysis (TMA), and Over-The-Horizon (OTH) operations in order to develop the skills required for effective command and control operations.

These devices provide an environment substantially equivalent to that found onboard ship, thus enabling students to develop and maintain the combat control expertise necessary to support Fleet operations. FY-90 established the requirement to provide advanced operator training for CCS MK 2 to support SSN 688, SSN 751 (AN/BSY-1), and TRIDENT SSBN (OHIO) Class submarines. The Fire Control Submarine and IUSS Training Requirements Review (SITTR) of 6/92 established the requirements for Common Basic Operator Trainers (CBOT) to support revised A-School training pipelines.

The CBOT will evolve into the Common Operational Analysis and Employment Trainer (COAET) by combining and leveraging from two existing systems, the CBOT and the Acoustic Analysis Trainer (AAT) in FY04. The COAET will be an interactive, fundamental skills-level trainer on which to offload operator and employment skills from the SMMTT. It will allow for low-cost introduction of new fleet requirements and upgrades.

FY03 procured 4 items: Hardware modifications for the enhanced CBOT EPM and three Fleet sites requested by the Fleet including SFMPL integration and SubSkillsNet integration.

FY04 procures 1 item: Hardware for the COAET EPM requested by the Fleet including Acoustic Analysis Trainer (AAT) integration, the enhanced CBOT, and the Sonar Tactical Decision Aid (STDA).

FY05 procures 3 items: COAET installation at three training sites to support operational and employment skills training.

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 120 PAGE NO. 3

UNCLASSIFIED

DD Form 2454, JUN 86

DD Form 2454, JUN 86

BUDGET ITEM JUSTIFICATION SHEET	DATE:
P-40	FEBRUARY 2004
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE
OTHER PROCUREMENT, NAVY/BA-4	SUBMARINE TRAINING DEVICE MODS/BLI: 5661/SBHD: 84TD
Program Element for Code B Items:	OTHER RELATED PROGRAM ELEMENTS
(TD009) SMMTT Phase 3  The SMMTTs are highly sophisticated shorebased combat system attack center trainers, compr system team personnel in all aspects of submarine search, detect, classify, attack, and surveilla replace all MIL Standard hardware in previous systems with commercial emulation hardware, er open architecture trainer systems allows for the continuous growth of functional flexibility ultimat system. Plans are established to likewise upgrade submarine tactical systems to an open arch Modifies functionality of the Periscope Simulator (PSIM) to provide common imaging training for FY04 procures 1 item: An engineering production model will be assembled. Its architecture will utilized for all stimulation of the tactical software. Mock-up hardware for emulation of the type 1 imaging training.  FY05 procures 5 items: Four SMMTT 3 systems will be assembled and installed at Fleet training advancements in tactical software.	nce operations in a controlled, simulated environment. SMMTT Phase 3 will habling platform independence and wide area network capability. The use of ely leading to employment training conducted for any submarine combat hitecture, and the trainers will be compatible with the tactical interfaces. CCS trainers.  support direct useage of tactical software. Internet server architecture will be 5 and 18 periscopes will be procured and interfaced for fully integrated

P-1 SHOPPING LIST

PAGE NO. 4

ITEM NO. 120

**UNCLASSIFIED** 

CLASSIFICATION:

## **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET	DATE:
P-40	FEBRUARY 2004
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE
OTHER PROCUREMENT, NAVY/BA-4	SUBMARINE TRAINING DEVICE MODS/BLI: 5661/SBHD: 84TD
Program Element for Code B Items:	OTHER RELATED PROGRAM ELEMENTS

#### (TD014) SSN/SSBN/SSGN CLASS TRAINER DEVICES

Funding for the procurement of Virginia, SSBN, SSGN Class trainers. FY04 procures 2 items: SSGN Ship Control Operation Trainer (SCOT) and Virginia Class Torpedo Room Trainer.

#### (TD015) SUBMARINE NON-TACTICAL APPLICATIONS DELIVERY INTERFACE SYSTEM (SNADIS) NETWORK

This system has been identified by the Submarine Type Commanders and approved by CNO to enable access to all data required to support Fleet Operational, Training, and Administrative requirements through a single, common, force-wide information delivery application interface. This program is for technical data, logistics, and training delivery management. The Program must operate within the IT21/NMCI network infrastructure; and should leverage both the VIRGINIA Class "paperless ship" initiatives and the Navy's non-tactical application development managed by SPAWAR, as well as recognize shipboard requirements for complete non-tactical applications integration. Additionally, broader digital data delivery mechanisms being evaluated by the Navy, such as Technical Data Knowledge Management - Integrated Data Environment (TDKM-IDE), are being employed to construct a comprehensive end-to-end program for identifying and sustaining Fleet information requirements.

FY04 provides initial procurement of engineering and hardware to deliver, set up, and populate the systems.

FY05 procures upgrades for systems throughout the submarine fleet.

#### (TD016) ELECTRONIC PERFORMANCE SUPPORT SYSTEM (ePSS)

This project will procure a series of innovative electronic Performance Support Systems (ePSS) for use in the Navy submarine Fleet. These ePSS tools will provide a means of facilitating On-the-Job Training without the need to temporarily remove the personnel from the ship for formal schoolhouse training. Most of this augmented capability will be assembled and adapted using existing COTS software products.

#### (TD6IN) INSTALLATION OF EQUIPMENT

Funding is for the installation of trainers, installation support for trainers, and installations in other shore facilities.

Estimates include competitive sourcing savings associated with consolidation of production support contracting efforts.

P-1 SHOPPING LIST

CLASSIFICATION:

DD Form 2454, JUN 86 ITEM NO. 120 PAGE NO. 5

**UNCLASSIFIED** CLASSIFICATION:

	WEAPONS SYSTEM C P-5	OST AN	IALYSIS			Weapon S	ystem							FEBRUAI	RY 2004
Other P	PRIATION/BUDGET ACTIVITY rocurement, Navy RDNANCE SUPPORT EQUIPMENT					ID Code		OMENCLATU			FICATIONS	S/RI I: 5661			
DA 4. 0	NORANGE GOTT ON EQUILIBRIUM		TOTAL COS	T IN THOUS	SANDS OF D	L OLLARS	OODINA	IIIL IIIAII	III DEVI	OL MODI	HOAHONE	7DL1. 3001	700110.0	-110	
COST	ELEMENT OF COST	ID	Prior		FY 2002			FY 2003			FY 2004		1	FY 2005	
CODE		Code	Years Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cos
	SUBMARINE WARFARE (N77)														
TD002	SUBMARINE TRAINING DEVICE MODS  Modifications							1,853	1,853		1,410	1,410		2,122	2,122
TD003	SMMTT/CC  Modifications  Modifications  Modifications  Tech Support	A					1 1 1	<b>5,906</b> 350 3,577 455	350 3,577 455 1,524						
TD005	SMMTT/A  Modifications  Modifications  Tech Support	A					1	<b>6,371</b> 2,900 1,936	2,900 1,936 1,535						
TD006	SUB CBOT/COAET  Modifications  Tech Support	A					4	<b>1,930</b> 461	1,844 86	1	<b>2,128</b> 2,020	2,020 108		<b>1,974</b> 621	1,860 111
	Continued on Next Page 1 2446, JUN 86		OPPING LIS									CLASSIFICA			<u>↓</u>

P-1 SHOPPING LIST DD FORM 2446, JUN 86 PAGE NO. ITEM NO. 120 6

	WEAPONS SYSTEM CO P-5	OST AN	IALYSIS			Weapon S	ystem							DATE: <b>FEBRUAR</b>	Y 2004
Other Pr	RIATION/BUDGET ACTIVITY COCUREMENT, NAVY RDNANCE SUPPORT EQUIPMENT					ID Code			RE/SUBHEAD		ICATIONS/	DI I. E6610.			
BA 4. UI	RDNANCE SUPPORT EQUIPMENT		TOTAL COS	T IN THOUS	SANDS OF DO	LLARS	SUBINIAN	INE IKAIN	IING DEVIC	E MODIF	ICATIONS/	DLI: 300 IU/	/ЗОБП: 64	410	
COST	ELEMENT OF COST	ID Code	Prior Years Total Cost	Quantity	FY 2002 Unit Cost	Total Cost	Quantity	FY 2003 Unit Cost	Total Cost	Quantity	FY 2004 Unit Cost	Total Cost	Quantity	FY 2005 Unit Cost	Total Cos
	CURMARINE WAREARE (N77) Continued			,									,		
TD009	SUBMARINE WARFARE (N77) Continued SMMTT Ph3 Modifications									1	10,052	6 350	4	<b>30,041</b> 5,975	22.00
	Modifications									'	6,350	6,350	1	3,465	23,90 3,46
	Tech Support											3,702			2,670
TD014	VA/SSGN/SSBN TRAINERS										5,896				
	Modifications  Modifications									1	2,986 2,910	2,986 2,910			
TD015	SNADIS										4,842	4040		4,650	
	Modifications											4,842			4,650
TD016	ePSS Modifications							2,000	2,000		2,500	2,500		0	
	TOTAL BLI 566100							18,060			26,828			34,691	
TD6IN	INSTALLATION (Non-FMP)								627			616			618
	TOTAL BLI 566106							627			616			618	
	Continued from previous Page 2446, JUN 86		IOPPING LIST						18,687			27,444 CLASSIFICA			39,40

	FEBRU <i>A</i>	ARY 2004
B. APPROPRIATION/BUDGET ACTIVITY C. P-1 ITEM NOMENCLATURE	SUBHEAD	
Other Procurement, Navy		
BA 4: ORDNANCE SUPPORT EQUIPMENT SUBMARINE TRAINING DEVICE MODIFICATIONS		84TD
CONTRACT	OF SPECS	DATE
Cost Element/ QUANTITY UNIT LOCATION RFP ISSUE METHOD CONTRACTOR AWARD FIR:	ST AVAILABLE	REVISIONS
FISCAL YEAR COST OF PCO DATE & TYPE AND LOCATION DATE DELIV	ERY NOW	AVAILABLE
(000)		
FISCAL YEAR (03)		
TD003 SMMTT/CC	03 YES	
RCI 1 3,577 NAVSEA N/A WX NUWCDIV NEWPORT, RI Jan-03 Sep-	-03 YES	
CCS STVTS EPM 1 455 NAVSEA N/A WX NAWC TSD Nov-02 Sep-	-03 YES	
TD005 SMMTT/A		
ARCI-III Kits 1 2,900 NAVSEA Mar-01 SS/IF OPT LM MANASSAS, VA Nov-02 Jul-		
SMMTT APB         1         1,936         NAVSEA         N/A         WX         NSWC/CD         May-03         Sep	03 YES	
TD006 SUB CBOT		
Enhanced CBOT         4         461         NAVSEA         N/A         WX         NSWC/CD         Dec 02         Sep	03 YES	
D. REMARKS		

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST Classification:

# **UNCLASSIFIED**

CLASSIFICATION:

BUDGET PROCUREM	ENT HIST	ORY AND	PLANNING EXHIB	BIT (P-5A)		Weapon System		A. DATE		
									<b>FEBRUA</b>	<b>ARY 2004</b>
B. APPROPRIATION/BUDGET	ACTIVITY				C. P-1 ITEM NON	MENCLATURE			SUBHEAD	
Other Procurement, N	-									
BA 4: ORDNANCE SU	PPORT E	QUIPMEN	Ţ		SUBMARINE	TRAINING DEVICE M	ODIFICA	TIONS		84TD
					CONTRACT			DATE OF	SPECS	DATE
Cost Element/	QUANTITY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS
FISCAL YEAR		COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
		(000)								
FISCAL YEAR (04) TD006 CBOT/COAET COAET EPM TB 16/23	1	2,020	NAVSEA	N/A	wx	NSWC/CD	Nov-03	Dec-04	YES	
TD009 SMMTT Ph 3 EPM	1	6,350	NAVSEA	N/A	wx	NSWC/CD	Nov-03	Dec-04	YES	
TD014 VA SSN/SSBN/SSGN SSGN SCOT Torpedo Room Trainer	1 1 1	2,986 2,910	NAVSEA NAVSEA	N/A N/A	WX WX	NSWC/CD NUWC/KPT	Nov-03 Nov-03	Aug-04 Aug-04	YES YES	
D. REMARKS										

P-1 SHOPPING LIST Classification: DD Form 2446-1, JUL 87

> **UNCLASSIFIED** ITEM NO. 120 9 PAGE NO.

#### **UNCLASSIFIED** CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A) Weapon System A. DATE **FEBRUARY 2004** C. P-1 ITEM NOMENCLATURE SUBHEAD B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy **BA 4: ORDNANCE SUPPORT EQUIPMENT** SUBMARINE TRAINING DEVICE MODIFICATIONS 84TD CONTRACT DATE OF **SPECS** DATE QUANTITY UNIT LOCATION RFP ISSUE **METHOD** CONTRACTOR **AWARD FIRST AVAILABLE REVISIONS** Cost Element/ FISCAL YEAR COST OF PCO DATE & TYPE AND LOCATION DATE **DELIVERY** NOW AVAILABLE (000)FISCAL YEAR (05) TD006 CBOT/COAET COAET Kits 3 621 NAVSEA N/A WX NSWC/CD Jan-05 Sep-05 YES TD009 SMMTT Ph 3 Kits 4 5,975 NAVSEA N/A WX NSWC/CD Jan-05 Feb-05 YES **EPM Advance** 3,465 NAVSEA N/A WX NSWC/CD Jan-05 Dec-05 YES REMARKS

Classification: P-1 SHOPPING LIST DD Form 2446-1, JUL 87

> **UNCLASSIFIED** ITEM NO. 120 PAGE NO. 10

## **UNCLASSIFIED**

HEDULE												۸ ،						Da			C. DA	TE		CE	DD		) V 1	2004	
					Otn			ırem	ent,			4-4		dific	atior		ning			<b>i</b>				rc	DK	UAR	K T 2	2004	
	1	FY 200	03 3	4	1	FY 20	04	4	1	FY 20 2	05 3	4	1	FY 20	06 3	4	1	FY 200	07 3	4	1	FY 20	08	4	1	FY 200	09 3	4	LATER
(P)																													
(P) (P)		9				4				8				9				8				8				8			
(P)																													
(C)	0	9	9	9	9	13	13	13	13	21	21	21	21	30	30	30	30	38	38	38	38	46	46	46	46	54	54	54	54
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			E.		RQMT	(QTY)				ТОТА	L RQM	IT	INSTA	LLED								UNFU	JNDED						
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	(P) (P) (P) (P) (C) (BP) (P) (P) (P) (P) (P) (P) (P)	(P)	(P)	(P)	(P)	(P)	(P)	Procedure   Proc	Procurem   Procurem	P   Procurement,   P   P   P   P   P   P   P   P   P	Procurement, Nav	Present   Navy/B/    Present   Navy/B/    Present   Navy/B/    Present   P	Other Procurement, Navy/BA-4    FY 2003	Other Procurement, Navy/BA-4   Mo   Mo   Mo   Mo   Mo   Mo   Mo   M	Other Procurement, Navy/BA-4    Submar   Modific   FY 2003   FY 2004   FY 2005   FY 2006   FY 20	Other Procurement, Navy/BA-4 Submarine Modification    FY 2003	Other Procurement, Navy/BA-4 Submarine Trais Modifications    FY 2003	Other Procurement, Navy/BA-4    Submarine Training   Modifications   Modificat	Other Procurement, Navy/BA-4    FY 2003	Other Procurement, Navy/BA-4 Submarine Training Devices Modifications    FY 2003	Other Procurement, Navy/BA-4    FY 2003	Other Procurement, Navy/BA-4    FY 2003	Other Procurement, Navy/BA-4 Submarine Training Devices Modifications    FY 2003	Other Procurement, Navy/BA-4    Submarine Training Devices   Modifications	Other Procurement, Navy/BA-4    Procurement   Navy/BA-4   Submarine Training Devices   Modifications   FY 2007   FY 2008   FY	Other Procurement, Navy/BA-4    Procurement   Navy/BA-4   Submarine Training Devices   Modifications	Other Procurement, Navy/BA-4  Submarine Training Devices  Modifications    1   2   3   4   4   4   4   4   4   4   4   4	Prince   P	Cher   Procurement   Navy BA-4   Submarine Training Devices   Note   Navy BA-4   Note   Navy BA-4   Submarine Training Devices   Navy BA-4   Navy Ba

DD for 2447, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO 120 PAGE NO 11

# **UNCLASSIFIED**

		ME PHASED F		NSTALLATIO				M NOMENCLATU  arine Training			s/SUBH:	: 84TD	DATE	FEBRUAR	Y 2004
		GET ACTIVITY	-4				1	Installing Age	nt				1		
1ST QT	R	2ND QTR	?	3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
			F	Y 2002							FY 2	2003			
											9				
		L	F	Y 2004							FY 2	2005			1
					4						8				

P-1 SHOPPING LIST

ITEM NO.120 PAGE NO. 12

CLASSIFICATION:

EXHIBIT P-43 SIMULATO		VINIINIC	DEVICE	= II ICTIEI	САТІ	ON				DATE:												FEBRU	۸DV	2004		
	tion/P-1 Line I		DEVICE	<u> </u>	CATI	ON				Weapon	Syste	m								IOC Date		FEDRU	AKI	2004		
Other Procui			661							vveapon	Cysic	111								100 Date	,					
Training	rement, may	y / L1. C	Ready for	Average									1													
Device		Delivery	Training	Student	Pric	r Years	FY	2002	FY	2003	F۱	2004	F	2005	F١	Y 2006	F١	Y 2007	F۱	2008	FΥ	2009	To C	Complete	-	Γotal
by Type	Site	Date	Date	Throughput						Cost				Cost					Qty							Cost
TD002 SUBM	ARINE TRAII	NING DI	VICE MO																							
VAR	VAR	VAR	VAR	N/A					VAR	1,853	VAR	1,410	VAR	2,122												
Total					0	0	0	0	0	1,853	0	1,410	0	2,122	0	0	0	0	0	0	0	0	0	0	0	5,385

Description

(TD002) SUBMARINE TRAINING DEVICE MODS

Provides funding for minor modifications which are upgrades to submarine training systems which are centrally managed systems.

These improvements/upgrades are required to keep training systems compatible with equivalent changes made to fleet operational equipment and to change trainer capabilities to meet emergent training requirements.

EXHIBIT P-43		AINING	DEVICE	ILISTIFIC	:ΔΤΙ	)N				DATE:												FEBRU	IARY	2004		
	ation/P-1 Line		DEVIOL	00011110	,, ,,,,,	<b>714</b>				Weapon	Syste	m								IOC Date		LDICO	AILI	2004		
Other Procur			61								•															
Training			Ready for																							
Device	0.4	Delivery				or Years		2002		2003		2004		2005		Y 2006		2007		/ 2008		/ 2009		omplete		Γotal
by Type TD003 SUB N	Site	Date	Date	Throughput	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cos
	STF Nor NUWC Npt NAWC TSD	Jul-03 Sep-03 Sep-03	Sep-03 n/a n/a	1,485 n/a n/a					1 1 1	350 3,577 455																
Total					0	0	0	0	3	4,382	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4,382

Description

(TD003) SUB MULTI-MISSION TEAM TRAINER (CCS)
To achieve desired submarine force readiness levels, it is necessary to construct highly sophisticated shorebased training facilities capable of training submarine combat system team personnel in all aspects of submarine approach, attack and surveillance operations in a controlled, simulated environment.

EXHIBIT P-4										DATE:																
SIMULATO			DEVICE	JUSTIFIC	ATIC	DN				147	<u> </u>									lioo D		FEBRU	AR۱	2004		
	ation/P-1 Line									Weapon	Syste	m								IOC Dat	е					
Other Procu	<u>irement, Nav</u>	y / LI: 56		1																						
Training			Ready for																							
Device		Delivery	_	Student		or Years		2002		Y 2003		Y 2004		Y 2005		Y 2006		Y 2007		Y 2008		Y 2009		Complete		Total
by Type	Site	Date	Date	Throughput	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	/ Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	y Cost
	STF Norva EPM NSWC	Jul-03 Sep-03	Sep-03 n/a	1,485 n/a					1 1	2,900 1,936																
Total					0	0	0	0	2	4,836	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2 4,836

Description

(TD005) SUB MULTI-MISSION TEAM TRAINER/A
The AN/BQQ-5 Series Sonar Systems are installed aboard SSN Class submarines. The Submarine Multi Mission Team Trainer Acoustic simulates the digital data processing and graphic displays of the associated tactical system.

EXHIBIT P-43										DATE:																
SIMULATOR AND TRAINING DEVICE JUSTIFICATION										FEBRUARY 2004																
Appropriation/P-1 Line Item										Weapon System IOC Date																
Other Procurement, Navy / LI: 5661															1											
Training Device		Delivery	Ready for Training	Average Student	Prior Years FY 2002 F		Y 2003	FY 2004		FY 2005		FY 2006		FY 2007		F	Y 2008	F	FY 2009		To Complete		Total			
by Type	Site	Date	Date	Throughput	Qty					Cost								Cost								
TD006 SUB C	 BOT/COAET 																									
Enh CBOT Enh CBOT	NSWC/CD NSS GTN	Sep-03 Oct-03	n/a Oct-03	n/a 1,612					1	461 1,383																
COAET EPM	NSWC/CD	Dec-04	n/a	n/a							1	2,020														
COAET COAET COAET	NSS GTN NSS PH NSS KB	Sep-05 Oct-05 Nov-05	Nov-05	3,262 2,016 312									1 1 1 1	621 621 621												
Total					0	0	0	0	4	1,844	1	2,020	3	1,863	0	0	0	0	0	C	0	0	0	C	8	5,727
Description (TD006) SUBN The purpose of																R (COAE	T)		1	1	.1	ı	1		1	

EXHIBIT P-43											DATE: FEBRUARY 2004															
SIMULATOR AND TRAINING DEVICE JUSTIFICATION											FEBRUARY 2004															
											Weapon System IOC Date															
Other Procurement, Navy / LI: 5661																										
Training		Deliver	Ready for	Average	D-i V		EV 000	20	EV 00	100	EV 00	10.4			EV 00	00	EV 00	07	EV 00	.00	EV 0	200	T- /			
Device by Type	Site	Delivery Date	Training Date	Student Throughput	Prior Ye	ears Cost	FY 200 Qty	Cost	FY 20 Qty	Cost	FY 20 Qty	Cost	FY 20 Qty	Cost	FY 20 Qty	Cost	FY 20 Qty	Cos	FY 20	Cos	FY 20 t Qty	Cos		Complete Cost		Total Cost
Бу Туре	Site	Date	Date	Throughput	Qty	Cost	Qty	CUSI	Qty	Cost	Qty	Cost	Qty	0031	Qty	COSI	Qty	003	Qty	003	i Qiy	003	. Qty	0031	Qty	Cost
TD009 SMMTT	Phase 3																									
EPM SMMTT3	NSWC/CD	Dec-04	n/a	n/a							1	6,350														
SMMTT3 SMMTT3 SMMTT3	NSS GTN NSTCP PH STF NOR	Feb-05 May-05 Aug-05	Apr-05 Jul-05 Oct-05	3,231 2,504 1,132									1 1 1	5,975 5,975 5,975												
SMMTT3 EPM Advanced	TTF KB NSWC/CD	Dec-05 Dec-05	Jan-06 n/a	3,305 n/a									1	5,975 3,465												
Total					0	0	0	0	0	0	1	6,350	5	27,365	0	0	0	C	0	(	0	(	0	O	6	33,715
Description																										
Description (TD009) SMMT CC/A Team Tra		subteam	training in	combat cor	ntrol and	d acoustic	s as w	ell as fu	ll com	bat syste	m tea	m training	ļ.													

EXHIBIT P-43 SIMULATOR AND TRAINING DEVICE JUSTIFICATION										DATE: FEBRUARY 2004															
										Weapon System IOC Date															
Other Procurement, Navy / LI: 5661										Weapon System															
Training Ready for Average																			1						
Device		Training	Student		Years				2003	FY 2004		FY 2005		FY 2006		FY 2007			2008	FY 2009		To Complete		Total	
by Type Site	Date	Date	Throughput	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
TD014 SSN/SSBN/SSGN	 er Device 	 s 																							
SSGN SCOT Torp Room  NSS Grtn  NSS Grtn	Aug-04 Aug-04		tbd tbd							1 1	2,986 2,910														
Total				0	0	0	0	0	0	2	5,896	0	0	0	0	0	0	0	0	0	0	0	0	2	5,896

Description TD014 NSSN

Procures modifications for the NSSN (Virginia Class) unique devices.